Fogler, Rubinoff LLP
Lawyers

77 King Street West
Suite 3000, PO Box 95
TD Centre North Tower
Toronto, ON M5K 1G8
t: 416.864.9700 | f: 416.941.8852
foglers.com

Reply To: Thomas Brett
Direct Dial: 416.941.8861
E-mail: tbrett@foglers.com
Our File No. 153783

November 27, 2015

VIA EMAIL, RESS AND COURIER

Ontario Energy Board
2300 Yonge Street
Suite 2701
Toronto Ontario
M4P 1E4

Attention: Kirsten Walli,
Board Secretary

Dear Ms. Walli:

Re: Board File Nos. EB-2015-0166 and EB-2015-0175

As promised, please find attached BOMA's Revised Argument in this case; revised only to the extent that the transcript references have been completed.

Yours truly,

FOGLER, RUBINOFF LLP

Thomas Brett
TB/dd
Encls.
cc: All Parties *(via email)*

K:\tbrett\wpdata\CLIENTS\Fraser & Company\BOMA - EB-2015-0166 Union & EB-2015-0175 EGD NEXUS\Walli ltr 2 (Submission).docx

EB-2015-0166
EB-2015-0175

Union Gas Limited
Enbridge Gas Distribution Inc.

Applications for pre-approval of the cost consequences of long-term natural gas transportation contracts with NEXUS Gas Transmission

---

SUBMISSION OF

BUILDING OWNERS AND MANAGERS ASSOCIATION, GREATER TORONTO ("BOMA")

November 27, 2015

Tom Brett
Fogler, Rubinoff LLP
77 King Street West, Suite 3000
P.O. Box 95, TD Centre North Tower
Toronto, Ontario M5K 1G8

Counsel for BOMA

Submission

Introduction and Conclusion

In BOMA's view, neither Union nor Enbridge have met the tests in the guidelines and previous Board decisions interpreting those guidelines for the pre-approval of the cost consequences of long-term natural gas transportation contracts on the proposed NEXUS pipeline.

In EB-2010-0300/EB-2010-0333, the Board (Sommerville, Hare, Taylor) decided not to grant the pre-approval of Union's and EGD's long-term gas transportation contracts. In that decision, the Board described the standard the utilities must meet to obtain pre-approval as follows:

> "There must be a compelling case that without the reallocation of risk to the ratepayer from the shareholder arising from pre-approval, new natural gas transportation infrastructure would not be constructed and new natural gas supplies would remain beyond the reach of the market. The Applicants have not met this standard." (p10)

The Board also stated that:

> "While it is true that Marcellus natural gas is a new source of supply – technological innovation having created access to otherwise non-recoverable natural gas supplies – it is important to note that it is not so new that it is not already being produced and transported - it has been integrated into the market, and it is having an effect on the market. Moreover, Pennsylvania and New York State can hardly be described as "frontier" areas, being relatively well populated with significant and mature natural gas pipeline infrastructure. As noted earlier, the purpose of the pre-approval process is to support the development of new transportation facilities to access new natural gas supply sources. This is clearly not the case." (p9)

Ohio is no more a "frontier" area than New York and Pennsylvania.

The Board's policy statement and guidelines developed in EB-2008-0280 are clear.

In the Board's conclusion, it states:

> "The Board believes that these applications should be limited to those that support the development of new natural gas infrastructure (e.g., new transportation facilities to access new natural gas supply sources)." (Report, p4)

The Union/EGD proposals to contract on NEXUS do not meet this test.

Need, Costs and Benefits

While NEXUS is a proposed new pipeline, there are a number of existing pipelines that access the Utica and Marcellus shales producing areas. For details, see Attachment 1, p6.

The greenfield NEXUS pipeline runs from Kensington, Ohio to Willow Run, Michigan. Kensington is one of several natural gas processing plants situated in the Appalachian basin. It has connections to both Texas Eastern and Tennessee Gas Pipelines, both long line pipelines that originate in the gulf (Texas) and traverse the Marcellus/Utica basin, on the way to New England. These connections and others allow Kensington to draw gas from many parts of the Marcellus/Utica shale basin. See, for example, the map at Exhibit A, Tab 3, Schedule 1, p11 of the Union application (Attachment 2 to this Submission).

Union and EGD then contract on different pipelines to bring gas from Willow Run to Dawn.

Union contracts on DTE/MichCon's existing pipeline facilities to move the gas up to the international border and then on Union's St. Clair pipeline to Dawn. EGD, on the other hand, will move its gas on DTE/MichCon facilities to the Milford interconnect with Vector, and then on Vector to Dawn. Attachment 3 is a map which shows these two routes. EGD has a significant shareholding in Vector (sixty percent). Vector will benefit, as part of the transportation path for both EGD and Union (more for EGD) which, along with Rover's capacity,

utilizes excess capacity on Vector which it needed to fill. EGD contracts for 25 km on DTE to Milford, and 125 km on Vector to Dawn; for a total of 150 km on existing facilities, and 400 km on the NEXUS greenfield pipeline, for a total of 550 km. The greenfield line is about seventy-three percent (73%) of the total (J2.5). The Union ratio appears to be about the same.

Of the NEXUS pipeline capacity of 1.5 Bcf (K1.1 NEXUS Pipeline Overview Day 1 of Hearing), 760,000 GJs capacity has been contracted to Dawn, of which approximately 500,000 GJs/day is held by producers active in the Utica/Marcellus shale, compared with Union at 150,000 GJs/day and EGD at 110,000 GJs/day (Transcript Volume 1, p35). The balance of the capacity on NEXUS is or will be contracted from Kensington to various United States receipt points. [The amounts are actually in dekatherms/day, but the utilities state the measurement in GJs is about the same].

It is very likely that Marcellus/Utica gas will arrive at Dawn through NEXUS, even if Union and EGD do not contract for it.

In addition, the Rover pipeline filed an application for a certificate of public convenience and necessity with the Federal Energy Regulatory Commission ("FERC") on February 20, 2015 (see Attachment 4). The Rover pipeline has a total capacity of 3.25 Bcf/day, somewhat larger than NEXUS, and will move gas from the Appalachian basin to various United States and Canadian receipt points. Approximately 950,000 GJs/day has been contracted to Dawn on Vector and Vector Canada to supply customers at Dawn and in northern Michigan (Ibid, p4).

Dawn will be, for the foreseeable future, awash with Marcellus/Utica shale gas, entering Canada at both Niagara (see below) and Dawn. Both EGD and Union have and will continue to have access to this gas.

Union's evidence is that unless it receives pre-approval for the cost consequences of its proposed fifteen year transportation contract with NEXUS, it will not sign this contract (more precisely, waive a condition subsequent in the Contract). EGD has stated only that it will consider its options.

Union has not been clear on whether it would sign a different contract with NEXUS, for example, a contract for a lesser amount of gas. BOMA is of the view that it does not get pre-approval for cost consequences, as a wholly-owned subsidiary of Spectra Energy Inc., the co-sponsor, along with DTE Inc., of the NEXUS pipeline. Union will not decide whether Union still contracts for capacity. Spectra will ultimately make that decision based on its broader commercial interests.

BOMA believes that it is in Ontario's interest, and in the interests of both Union and EGD customers, for Union and EGD to have access to gas from the Marcellus/Utica shales, which are the principal gas resources in the Appalachian basin. Gas prices there are relatively low, the basin is close to Southern Ontario, and there is a highly developed gathering system, gas processing, and pipeline infrastructure in the region, with even more planned.

And, as the Board is well aware, substantial volumes of Marcellus/Utica shale gas is already flowing into Ontario. EGD has capacity for 200,000 GJs/day for ten years on TransCanada Pipelines Ltd. ("TCPL") from Niagara to Parkway-Enbridge delivery point, with gas flows to begin January 1, 2016. Union purchased 20,000 GJs capacity on TCPL on a ten-year contract at Niagara in 2012, and is already receiving that gas. Union also purchased 20,000 GJs of gas at Dominion South (a Marcellus/Utica hub) for delivery at Dawn commencing December 1, 2015,

in a few days' time. The gas will be transported to Dawn through the existing pipeline network (Transcript Volume 2, p56).

Finally, 750,000 GJs/day is currently contracted on TCPL's Niagara line, effective this past November 1st. Over 400,000 GJs/day is flowing into Ontario on TCPL's Niagara line currently. The amount will increase to 1.2 Bcf/day (1,200,000 GJs) by 2018 (J2.2, Attachment 5). That gas is moving to Niagara on several US pipelines, including National Fuel Gas, Tennessee, and Empire, which have sourced the gas in the Appalachian basin from the Marcellus and Utica shales.

The shippers of gas who have contracted on the US pipelines to move that gas to the Canada-United States border, including the 200,000 GJs/day that is being transported on the TCPL "domestic line" directly to EGD's Parkway receipt point, and on the TCPL mainline from the border to Union's Kirkwall receipt point, and mainly, onward on Union's facilities to Dawn, are producers and marketers active in Marcellus/Utica shales. So, currently, at least 750,000 GJs/day of Marcellus/Utica shale gas is contracted to Parkdale, Kirkwall, and Dawn, and even more than that in 2017 and 2018 (J2.2). EGD testified that many of the producers they talked about buying gas from at Niagara for their 200,000 GJs/day requirement, had contracted their gas all the way to Dawn, and preferred to sell their gas at Dawn due to the very large transactions volumes at that point, and the nearby storage. The liquidity at Dawn would result in market driven prices for both buyers and sellers.

Clearly, the Appalachian basin is not a new source of gas for Ontario, for Union, or for EGD.

The basin is currently the largest producing shale basin in the United States and the fastest, growing basin. It is growing even faster than the prolific Montney, Horn River, and Duvernay shale basins in Alberta and British Columbia.

In the hearing, Union attempted, followed by EGD, to differentiate between the Utica and Marcellus shales, so as to be able to declare that the Utica shale is a new source of gas, even if the Marcellus is not. EGD went so far as to say that Utica was a new frontier. These arguments were first raised in the hearing itself. Union's prefiled evidence, including the Sussex Report, continually refers to gas from the Marcellus/Utica shales (Transcript Volume 3, pp 3, 5, 6, 8, 10, 11; Exhibit A, Tab 3, Schedule 2, pp 2, 4). In addition, in its recent FERC application to certify the NEXUS pipeline, the applicant stated:

> "The NEXUS Project is a new interstate pipeline system designed to transport 1.5 million Dth/day of Appalachian basin shale gas, including Utica and Marcellus shale production directly to consuming markets in Northern Ohio and Southeastern Michigan and to the Dawn Hub in Ontario, Canada" (Attachment 6, p2).

While the Utica shales have not been developed to the same extent as the Marcellus shale, they are hardly new. They obtained their name, Utica, because they were first observed in a creek bank near Utica, New York in 1842. More important, according to United States Energy Information Administration ("EIA") shale gas production reports, since early 2012, the Marcellus and Utica shales have accounted for eighty-five percent of the increase in production from all seven major United States shale producing regions. As of November 2015, Utica shale gas production exceeds 3 Bcf/day, a rapid increase from 2011, in which about 200 Mcf/day was produced. Collectively, the Marcellus and Utica shale gas production increased by 12 Bcf/day from January 2012 to June 2015. The Utica shale production is the six largest producing shale resource in the United States. Moreover, it is served by a substantial pipeline, gathering system,

and gas processing infrastructure. A recent summary report by Natural Gas Intelligence (one of two leading natural gas industry dailies) shows that the Utica shale producing area is accessed by the following pipelines:

- Clarington Hub
- Cobra Pipeline
- Columbia Gas Transmission
- Dominion Transmission
- East Ohio Gas
- Rockies Express
- Tennessee
- Texas Eastern (Spectra owned)

There is no shortage of pipeline capacity into and out of the Utica shale production areas. The EIA data, and the NGI Reports, are Attachments 7 and 1, respectively.

EGD and Union agreed that the shales largely overlapped and that in most instances, the Utica shale lay beneath the Marcellus in the same locations or contiguous ones[1].

Mr. Isherwood raised the distinction only well into the hearing when Union realized that Union could not characterize the Appalachian basin (Marcellus/Utica) as a new source of supply, a new frontier. EGD then followed suit with even more outrageous claims. But the statements were clearly a "Hail-Mary pass", in football terms. They were statements completely unsupported by evidence. The Board should give them no weight.

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[1] BOMA refers the Board, for example, to the fact Union's gas supply expert continually referred to Marcellus/Utica shales in his oral testimony (Transcript Volume 3, p93).

As to the utilities' musings that the NEXUS line may not be built if they were not to sign on, such is highly unlikely and not supported by any evidence. It is pure conjecture. In BOMA's view, Spectra could ultimately require Union to contract for capacity regardless of whether it obtains pre-approval.

The evidence is the Union capacity accounts for only ten percent (10%) of the total capacity of the NEXUS pipeline, while EGD accounts for a further seven percent (7%). Spectra-DTE has recently filed their application for a certificate of public convenience and necessity at FERC. It has strong support (contracts) from many of the largest producers in the Appalachian basin. It will very likely proceed, with or without Union.

The evidence suggests (J2.4; J2.1) that at current Canadian and United States pipeline tolls, and prevailing commodity prices in the Marcellus/Utica production zones, acquiring gas via NEXUS to Dawn is more expensive for Union and EGD than acquiring gas from the same fields at Kirkwall or Dawn via the TCPL-Niagara route. Union has agreed with this point (Transcript Volume 2, p93).

Union has emphasized, more than EGD, the cost advantage of buying gas "in the basin", in the producing basis rather than at Dawn. However, Union has always bought considerable gas at Dawn and continually proclaims its advantages as a "great hub" (Transcript Volume 1, p37), the second most liquid hub in North America (Transcript Volume 1, p37), and in like terms.

EGD, for its part, preferred to make its substantial initial purchase of Marcellus/Utica gas at Niagara, not in the Marcellus/Utica basin south on Dominion North or South hubs or other transaction points. Among its reasons was the fact that it would avoid the risk of contracting on

United States pipelines, and dealing with the complication of purchasing gas in other jurisdictions.

Union has not demonstrated the benefits of the NEXUS contract, other than diversity of path (that is upstream transport path). It already has the ability to purchase inexpensive Marcellus/Utica shale gas at Dawn, or Kirkwall, gas which has come via TCPL/Niagara/Chippewa.

EGD's case for pre-approval is no stronger than that of Union. EGD is already purchasing approximately twenty-five percent of its system supply from Marcellus/Utica, and transporting it into its franchise areas via Niagara. It already moves a very large part of its portfolio through Dawn and needs the Niagara path and Marcellus/Utica shale gas for both transportation path and gas supply diversity. EGD agreed that transporting additional supplies through Dawn further concentrates EGD's transport path, rather than further diversifying it.

If EGD wishes to contract for supply in the Marcellus/Utica basin at a later date, it can do so, and move the gas into its franchise via United States pipelines, reaching to Niagara and then through TCPL (see Table in evidence).

EGD already has a ten-year contract with TCPL to underpin its gas supplies purchases at Niagara. In order to mitigate commodity risk, EGD contracts for the one-, two-, and three-year terms at Niagara, much as it and Union intend to do in the Appalachian basin.

BOMA believes that the benefits to Union and EGD ratepayers, if any, are very modest, relative to the risks they would take on if pre-approval were granted.

EGD already has substantial exposure to Marcellus/Utica basin gas via Niagara, and very large exposure to Dawn, as a transportation path. Its gas supply is already nicely diversified. Its upstream transportation path, on the other hand, is already highly concentrated on the Dawn-Parkway system. EGD already enjoys the lowest cost gas of either pipeline through its Niagara/TCPL route. Its gas purchase costs at Niagara were Dawn index less forty-six cents (TC, September 9, 2015, p58).

EGD firm capacity commitment to NEXUS is about 110,000 GJs/day, only two-thirds of that of Union. It may well decide to contract on NEXUS, even if it did not gain pre-approval. It pointedly did not say at the hearing that it would withdraw in that case (Transcript Volume 3, p107).

While Union does not currently purchase a large amount of Marcellus/Utica gas (20,000 GJs since 2012, ten percent of EGD's purchases), a great deal of Marcellus/Utica gas is now being transported to Union's system to Dawn or Parkway via Niagara and TCPL (see above). EGD testified that when its purchases at Niagara were complicated by the fact that many of the Marcellus/Utica producers had contracted, or wanted to contract through to Dawn because of its greater liquidity.

Union can, if it wishes, purchase some of their gas at Dawn. This opportunity also helps to provide the additional take-away capacity at Dawn that Union has stated is important. EGD is, of course, already taking away a large amount of gas from Dawn.

Union has stated that proceeding with a NEXUS purchase would realize landed cost savings for customers relative to the cost of purchasing in Western Canada. However, it is clear that the analysis is flawed. EGD has similar gas supply savings over the last several years, but they were

not claimed as a result of taking a contract with NEXUS, but of the overall shift away from WCSB gas over the last several years, and TCPL and Alliance tolls in favour of eastern source of supply and short haul tolls on TCPL and upstream pipelines, and the importance to that that shift of the Settlement Agreement among Union, EGD and TCPL, approved by the National Energy Board, a shift that necessitated the construction of hundreds of millions of dollars of new infrastructure on Union's Dawn-Parkway system. Union has made a similar overall shift. Union will have the option to rebuild its supply, including contracting at Niagara, or increasing its gas supply from certain mid-west basins, more likely a blend of all of these (Transcript Volume 1, p49). So, the Board should attach little, if any, weight to the grossly exaggerated "savings".

Finally, the evidence is clear that the Union and EGD contracts with NEXUS are not required to maintain Dawn's status of a liquid hub. Dawn was variously described as a "great Hub", "second largest Hub in North America", etc. by Union and EGD witnesses. Dawn's liquidity will not be materially affected by these purchases.

The Union proposal to take capacity in the NEXUS pipeline is further complicated by the fact that the NEXUS pipeline is co-sponsored, fifty percent owned by, and will be operated by, its parent company. For example, NEXUS Gas Transmission LLC "in its capacity as operator" applied for the FERC certificate.

Union has stated that it will deal with NEXUS as if NEXUS were an affiliate, which it may very well be (Transcript Volume 1, p64). NEXUS Gas Transmission LLC is a wholly-owned subsidiary of Spectra Energy Inc., and is, therefore, an affiliate of Union. The other co-sponsor is DTE Inc. Among other things, the parent company of Michigan Consolidated Gas Company, a Michigan gas transportation and distribution company. Subsidiaries of each of Spectra Energy

Inc. and DTE Inc. have signed the Union contract for NEXUS as there is no single entity that owns the pipeline. There is no evidence on the record as to the nature of the relationship between Spectra Inc. and DTE Inc. except that the two are "co-sponsors" of the project. They are not partners nor shareholders in a corporation. In such circumstances, Union is likely affiliated with the venture. Even if it is not, it has pledged to act as if it were (our emphasis).

Section 2.3.4 of the Affiliate Relationships Code ("ARC") deals with Transfer Pricing and Information Disclosure in transactions with affiliates.

Section 2.3.1 states that a contract between a utility and its affiliate shall not exceed five years.

Section 2.3.4 states that:

> "Where a reasonably competitive market exists for a service, product, resource, or use of an asset, a utility shall pay no more than the market price when acquiring that service, product, resource or use of an asset from an affiliate".

A market does exist for pipeline transportation to Dawn, or Kirkwall, for Marcellus/Utica shale gas. It consists of existing pipeline routes such as Tennessee, Empire, or National Fuel Gas pipeline to Niagara/Chippewa, and the then TCPL to Union, or the proposed Rover pipeline, and other existing pipelines. Union testified that it has contracted for 20,000 GJs of Marcellus/Utica gas to flow November 1, 2015 through existing pipelines to Dawn (our emphasis). However, Union has conducted no competitive process to select the most economic alternative.

Moreover, it has contracted for fifteen years, rather than five. On both counts, it is in breach of the code.

Risk

The Board made it clear in its decision (see above, at p2) that granting pre-approval of a long-term pipeline transportation contract transfers risk from the utility's shareholders to its ratepayers.

The reason is, of course, that absent pre-approval, the shareholder bears the risk that the contractual arrangements proved to be inferior to the available alternatives at the time the contract was entered into. Said otherwise, the shareholder remains exposed to a subsequent ratepayer prudency challenge, which could result in the Board not allowing part of the capital expenditure into rate base. If Union's cost recovery is assured via pre-approval, the ratepayers have lost their right to challenge the decision to contract with NEXUS on prudency grounds, and will have to pay the negotiated tariff, even if the decision were imprudent. The risk is heightened in this case due to the fact that the contract is for a fixed price fifteen year period, with no economic off ramps. Regulated pipeline tariffs can change dramatically over fifteen years, as evidenced by the recent TCPL experience.

So, Union is locked into a fixed price commercial arrangement with its parent company regardless of what happens with pipeline tariffs over the long term.

Union is proposing to use ratepayer funds to "take a position" for fifteen years, at a cost of $715 million, on a particular pipeline transport path to the Marcellus/Utica basin, a basin to which it already has access. It should do so at its shareholder's risk. Union is free to contract with NEXUS, if it wishes, but should not place the risk of that contract with ratepayers.

Union has not provided any evidence to show how it would mitigate the ratepayers' risk of having to pay a fixed price for fifteen years for transportation or gas prices from a basis if either transport costs from that basin or commodity cost in that basin are, or become, materially out of the market.

While the proposed contract with NEXUS provides some protection from regulatory and construction risk, once the pipeline is operational, Union and EGD are liable for fifteen years of fixed tolls, in Union's case, in the amount of about $46 million per year. While the fixed tolls provide the commercial underpinning for the project financing of the market, it is not obviously beneficial for ratepayers.

Union and EGD have already successfully saddled ratepayers with cost consequences of much of its recent investment in Dawn-Parkway expansion, and EGD's Segment A and Segment B expansions. It would be doubly unfair to place the risk of these contracts with ratepayers.

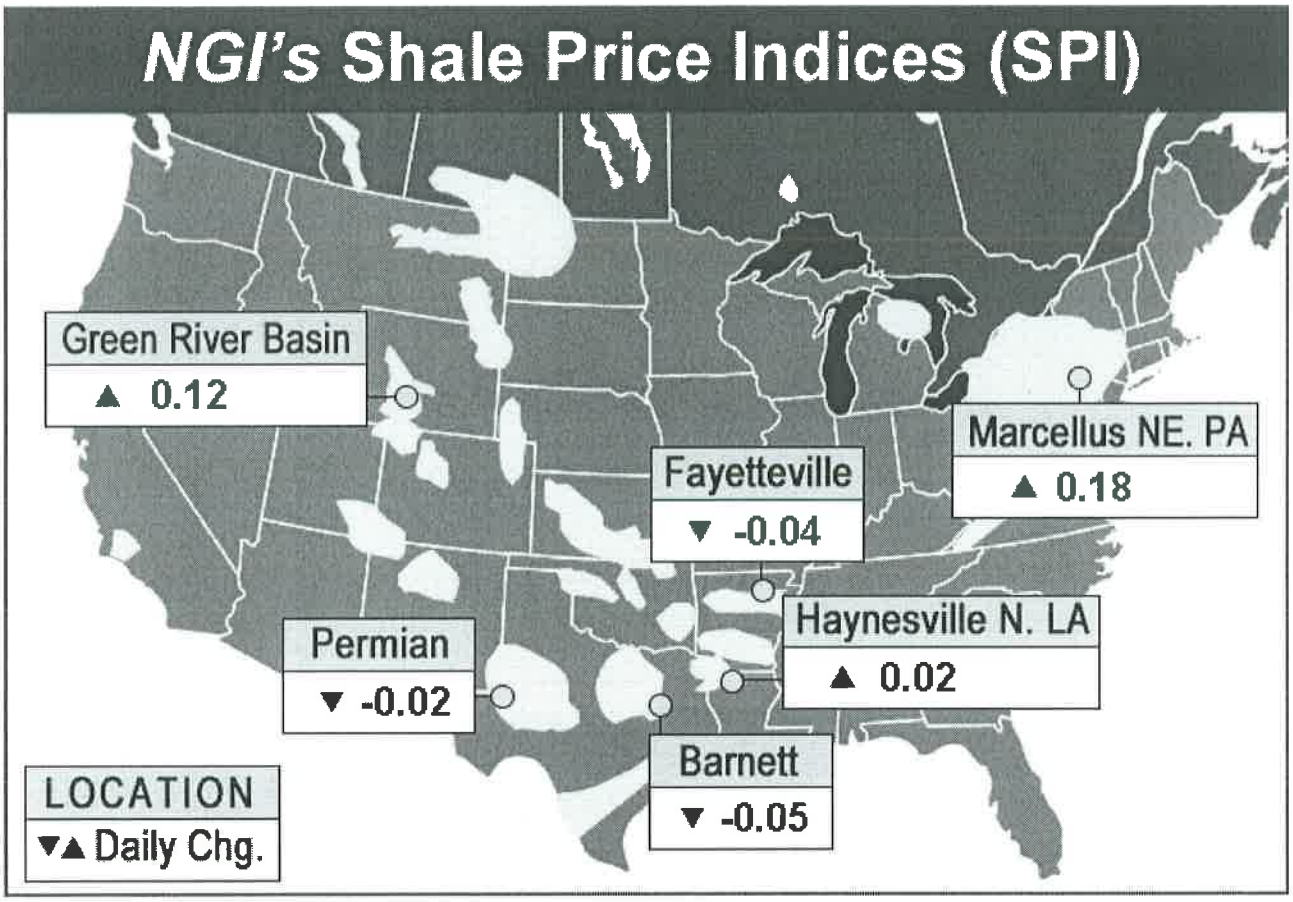
All of which is respectfully submitted, this 27th day of November, 2015.

Tom Brett,
Counsel for BOMA

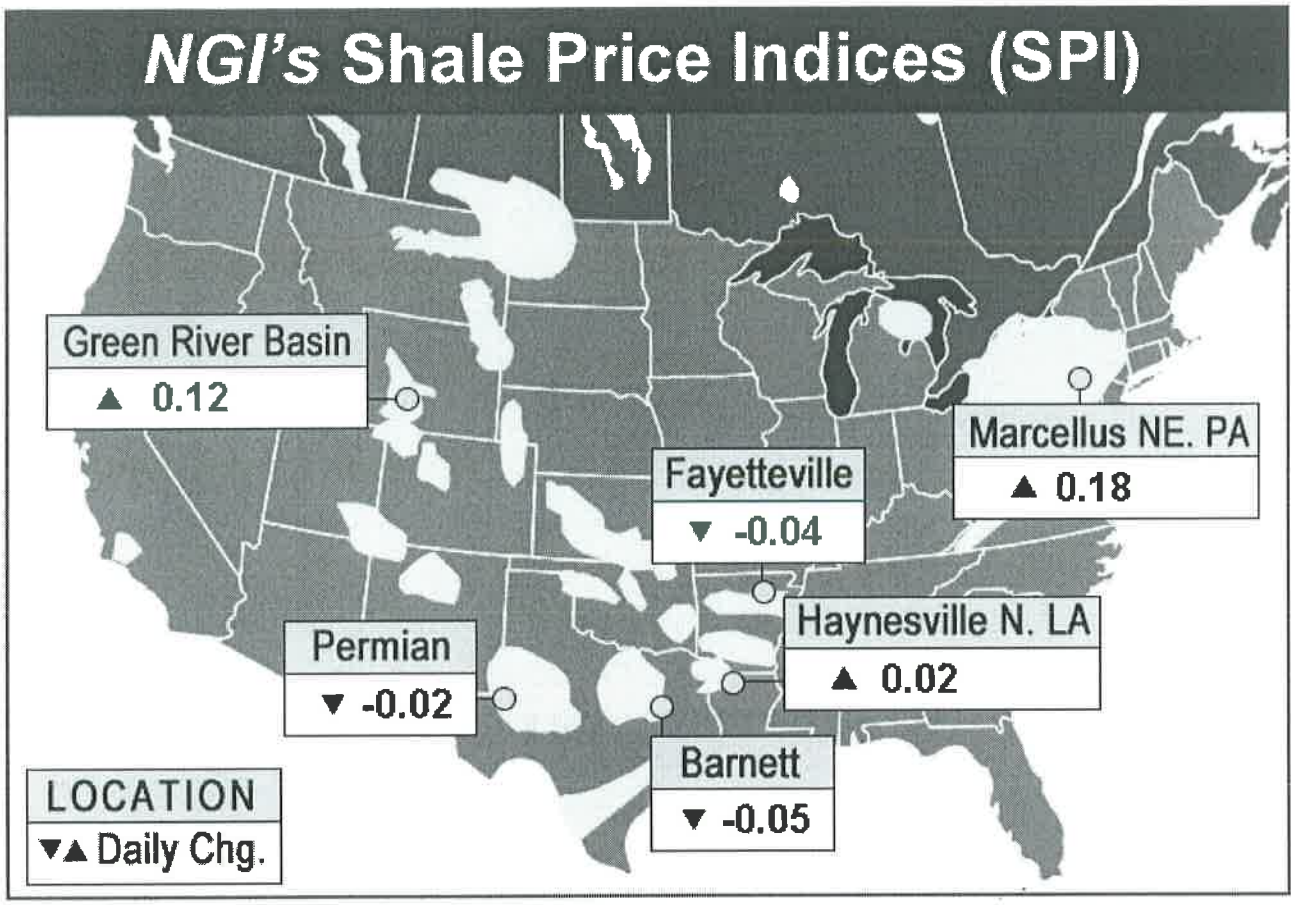
NATURAL GAS INTELLIGENCE

- HOME
- DAILY GPI
  - DAILY GPI HOME
  - Rockies Express (REX)
  - M&A
  - Regulatory
  - Markets
  - Infrastructure
  - Production
  - Price
  - Drilling
  - NGV
  - LNG
  - Storage
- SHALE DAILY
  - SHALE DAILY HOME
  - All Basins
  - > Bakken
  - > Barnett
  - > Eagle Ford
  - > Fayetteville
  - > Haynesville
  - > Horn River
  - > Marcellus
  - > Mississippian Lime
  - > Montney
  - > Niobrara
  - > Permian
  - > Tuscaloosa Marine Shale
  - > Uinta
  - > Utica
  - Canadian Oil Sands
  - International Shale
- NGI
  - NGI MIDDAY PRICE ALERT
  - NGI FORWARD LOOK
  - NGI WEEKLY NEWSLETTER
  - NGI BIDWEEK ALERT
  - NGI BIDWEEK SURVEY
  - NGI WEEKLY GPI
  - Publishing Calendar (Revised Dec-1)
- DATA
  - *New* NGI's MidDay Price Alert
  - Price Data "Learn More"

- Gas Price "Snapshots"
- Bidweek Alert Data
- Shale Gas Prices (subscriber-only)
- NGI Price Index Methodology (pdf)
- *New* NGI Shale Price Index Methodology (pdf)
- *New* NGI Price Index Audit Report Results
- NGI Datafeed Spec and Automation
- NGI Price Index Change Notice - Aug. 1



NGI's Shale Basin Prices (Subscriber Content)
U.S. Unconventional Basin Rig Count
3Q2015 Earnings Calls List & Coverage



NGI's Shale Basin Prices (Subscriber Content)
U.S. Unconventional Basin Rig Count
3Q2015 Earnings Calls List & Coverage

NGI's NatGas Prices - Biggest Movers		
Daily	Tenn Zone 6 200L	▲ +1.00
Weekly	Transco Zone 6 NY	▲ +0.34
Bidweek	Tenn Zone 5 200L	▲ +1.58
Shale	Marcellus - NE PA	▲ +0.18

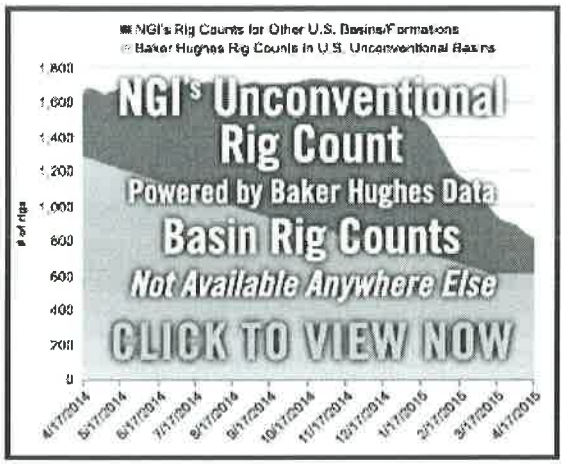
Subscriber Content

- Shale Basin Prices

PDF Current Issue

Premium Content

- Shale Price Data Feed
- Shale Price Historical Data



North America Resource Plays

- Canada
  - Duvernay Shale
  - Eastern Canada
  - Horn River
  - Montney Shale
- Gulf Coast
- Mid-Continent
- Northeast
- Rocky Mountains/West

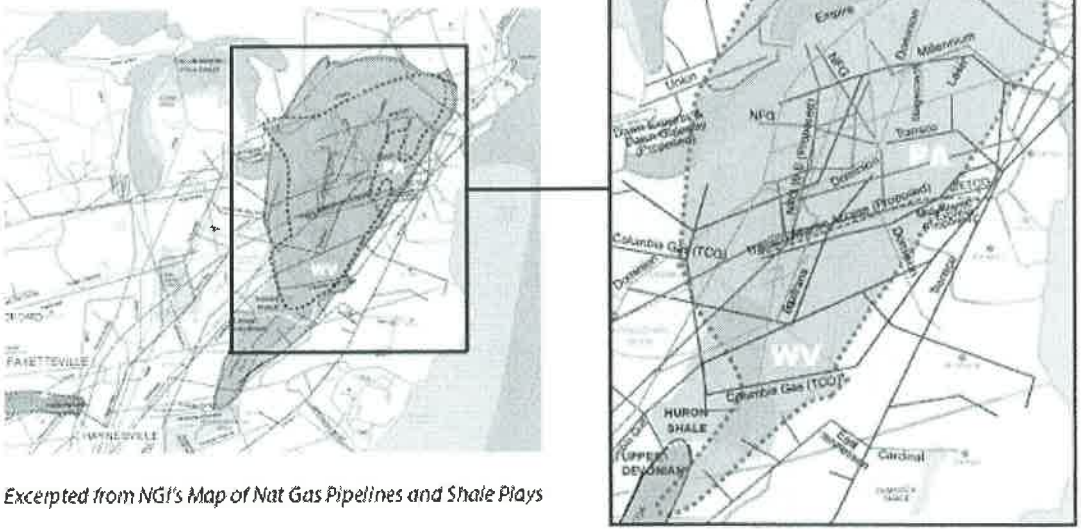
- El Nino Digs In; December Called 8 Cents Lower
- NatGas Cash Firms Overall; Short Covering Lifts December to 6-Cent Gain
- Barclays Reduces U.S. Natural Gas Price Forecast, Sees Tightening Market in Latter Half of 2016
- Spectra's Appalachia-Focused Nexus Filed at FERC
- Cheap Gulf Coast NGLs Inspire New LyondellBasell Plant

Home » Topics » Utica

Utica

RSS

States Included: Kentucky, Ohio, Maryland, New York, Pennsylvania, Tennessee, West Virginia, and Virginia



Excerpted from NGI's Map of Nat Gas Pipelines and Shale Plays

Utica Overview: The Utica Shale is a massive formation that lies beneath portions of Kentucky, Ohio, Maryland, New York, Pennsylvania, Tennessee, West Virginia, and Virginia. Read More

Utica Counties: OH: Ashland, Ashtabula, Belmont, Carroll, Columbiana Read More

Utica Pipelines (natural gas): Clarington Hub, Cobra Pipeline, Columbia Gas Transmission, Dominion Transmission, East Ohio Gas, Rockies Express, Tennessee, Texas Eastern Read More

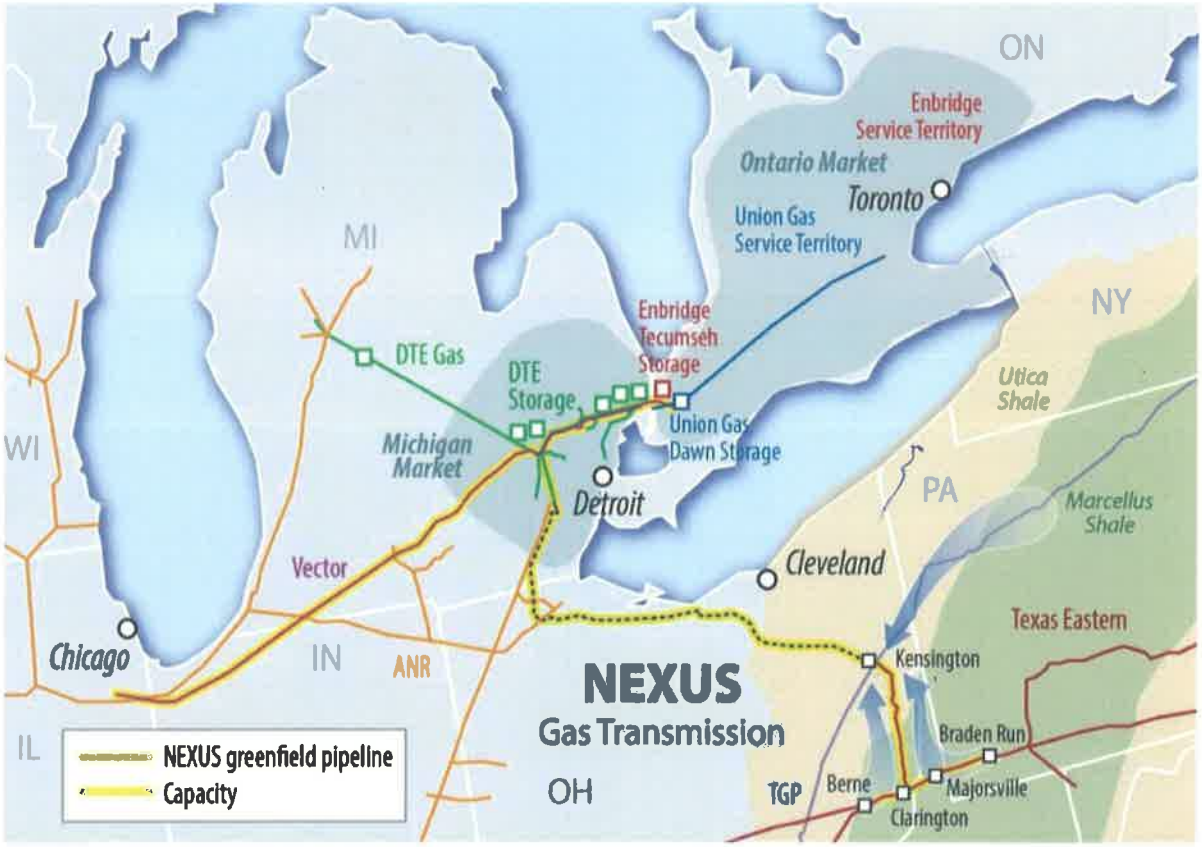
Utica Net Acreage Table: A table detailing the net acreage owned by various companies in the Utica play. View Table

- Articles
- Charts & Graphs

ARTICLES

Sharp Production Increases in 2014 Boosted Value of Ohio Oil/Gas

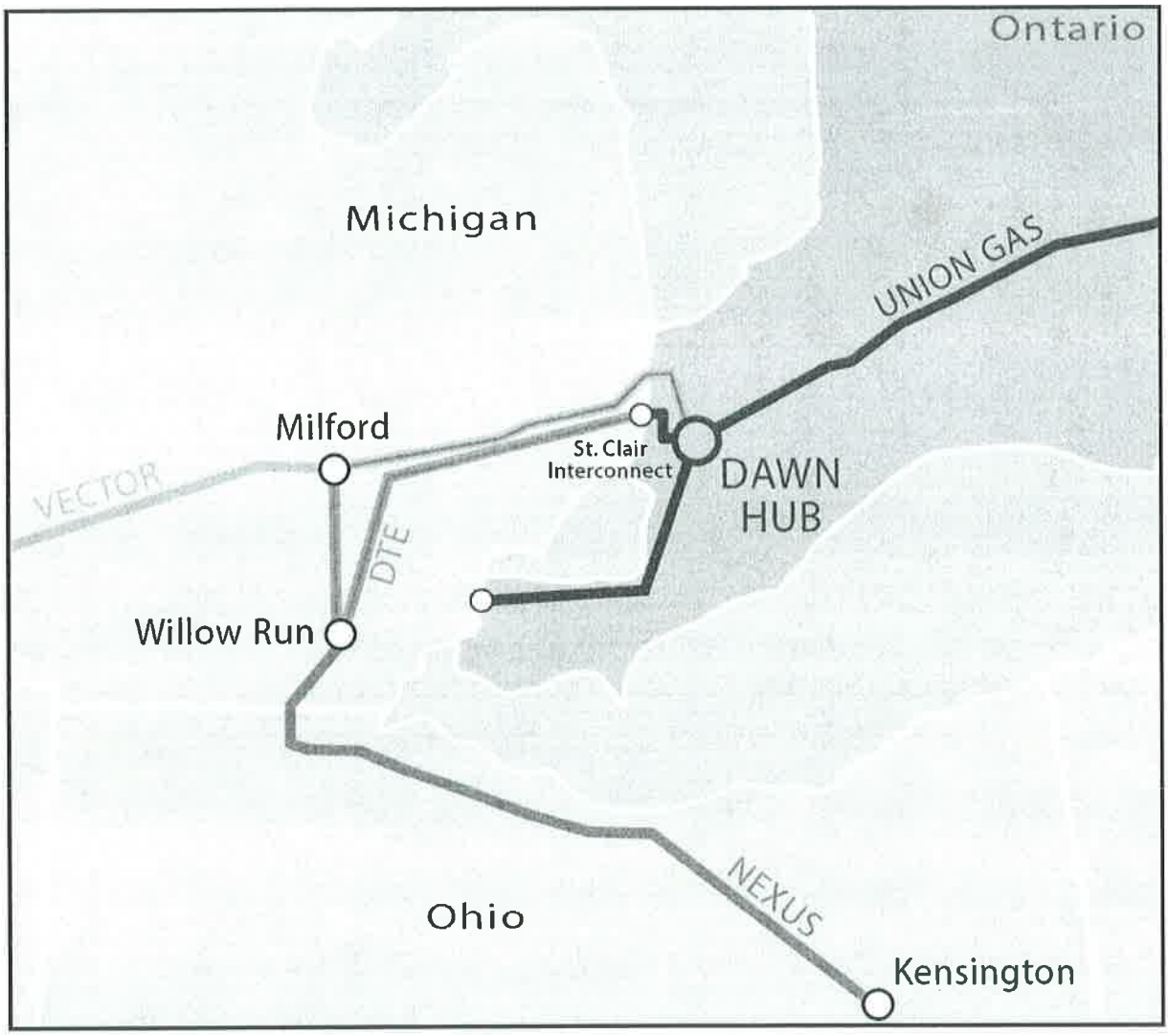
November 23, 2015
Jamison Cocklin
The combined value of all Ohio oil and natural gas production in 2014 was more than $3.1 billion, up nearly 132% from the prior year, according to an annual mineral industries report released late Friday by the Ohio Department of Natural Resources' (ODNR) Division of Geological Survey. Read More



30. As proposed, NEXUS includes both greenfield pipeline construction and, to minimize environmental disruption and optimize project efficiencies, the contracting of firm capacity on existing and expanded pipeline systems. Contracting of firm capacity on existing and expanded pipeline systems will entail the expansion of the Texas Eastern Transmission, LP system in Ohio where NEXUS initiates, the likely expansion of the DTE gas transportation system in eastern Michigan and extending to the U.S./Canada border and the likely expansion of Vector in southern and eastern Michigan, northern Indiana, eastern Illinois and western Ontario.

Witnesses: J. LeBlanc
A. Welburn

Figure 3-2
NEXUS Pipeline Paths to Ontario/Dawn



(Source: Union Gas)

The NEXUS project will be capable of transporting approximately 1.5 billion cubic feet per day (Bcf/d) of natural gas away from the Utica/Marcellus to markets in Ohio, Michigan and Ontario. The anticipated in-service date for the NEXUS pipeline project is November 1, 2017.

ROVER PIPELINE
An ENERGY TRANSFER Company

February 20, 2015

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: OEP/DG2E/Gas 3
Rover Pipeline LLC
Docket No. CP15- -000
Rover Pipeline Project

Dear Ms. Bose:

Rover Pipeline LLC ("Rover") submits this certificate application for filing to the Federal Energy Regulatory Commission ("Commission" or "FERC") pursuant to Section 7(c) of the Natural Act, and Parts 157 and 284 of the Commission's regulations requesting authorizations to construct, own, and operate a new interstate natural gas pipeline system including approximately 711 miles of natural gas pipelines extending from the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to a point of interconnection with the Vector Pipeline, LP ("Vector") system in Livingston County, Michigan and related facilities; approval of the Rover pro forma Gas Tariff; approval of blanket certificates authorizing Rover to engage in certain self-implementing routine activities under Part 157, Subpart F of the Commission's regulations, and transportation of natural gas on an open-access and self-implementing basis under Part 284, Subpart G of the Commission's regulations.

This FERC filing is being submitted under the following volumes:

- Volume I – contains Public Information
  - Transmittal Letter
  - Text of the Application
  - Notice of the Application
  - Exhibits required pursuant to Section 157.14

- Volume II-A – contains Public Information
  - Resource Reports 1 through 12, and Appendices

- Volume II-B – contain Public Information
  - Attachments for Resource Reports 1 through 12

- Volume III – contains **Critical Energy Infrastructure Information ("CEII")**
  - Exhibits G, and G-II
  - Resource Report 1, Attachment 1A - Compressor Station Plot Plans

1300 Main Street Houston, TX 77002
Phone: 713-989-7000

February 20, 2015
Rover Pipeline Project (cont.)

- Volume IV – contains **Privileged Information**
  - Exhibit I – Precedent Agreements
  - Exhibit Z-2 - Precedent Agreements
  - Resource Report 1, Attachment 1A - Landowner Mailing List
  - Resource Report 4, Attachments 4A - Cultural Correspondence
  - Resource Report 4, Attachments 4B though 4H - Archaeological/Architectural Survey Reports
  - Resource Report 8, Attachment 8A - Conservation Reserve Program

In conjunction with FERC staff comments received on February 11, 2015 to Rover's Second Draft Resource Reports 1 through 12, FERC staff requested a matrix identifying the specific locations in the Resource Reports where the information requested pursuant to their comments could be found in the Resource Reports being submitted with the filing. Applicant is hereby submitting the requested matrix as Exhibit Z-3.

Pursuant to Section 388.112 of the Commission's regulations, Rover requests that the information submitted in Volume III be accorded **CEII** treatment, and that the information submitted in Volume IV be accorded **Privileged and Confidential** treatment. This filing is being submitted electronically to the Commission's eFiling website pursuant to the Commission's Order No. 703, Filing via the Internet Guidelines issued on November 15, 2007 in FERC Docket No. RM07-16-000. Rover is providing paper and electronic copies to the Commission's Office of Energy Projects staff by their directions. Any questions or comments regarding this filing should be directed to the undersigned at (713) 989-2606.

Respectfully submitted,

/s/ Kelly Allen

Mr. Kelly Allen, Manager
Regulatory Affairs Department

cc: Ms. Kara Harris, Office of Energy Projects
Mr. Kevin Bowman, Office of Energy Projects
Ms. Jennifer Ward, Cardno Entrix

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of	§	
	§	Docket No. CP15-_____-000
Rover Pipeline LLC	§	

APPLICATION OF ROVER PIPELINE LLC FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

VOLUME I

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

Page No.

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of	§	
	§	Docket No. CP15-_____-000
Rover Pipeline LLC	§	

APPLICATION OF ROVER PIPELINE LLC
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

Rover Pipeline LLC ("Rover") hereby files this application ("Application") with the Federal Energy Regulatory Commission ("Commission" or "FERC") pursuant to Section 7(c) of the Natural Act ("NGA"),[1] as amended, and Parts 157 and 284 of the Commission's regulations,[2] requesting the following authorizations:

(1) A certificate of public convenience and necessity authorizing Rover to construct, own, and operate under Part 157, Subpart A of the Commission's regulations[3] a new interstate natural gas pipeline system with a total system capacity of 3.25 billion cubic feet per day ("Bcf/day") of natural gas, including: (a) approximately 711 miles of 24-inch, 30-inch, 36-inch and 42-inch diameter "Supply Laterals" and "Mainlines"[4] extending from the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to a point of interconnection with the Vector Pipeline, LP ("Vector") system in Livingston County, Michigan; ten new compressor stations (six on the Supply Laterals; and four on the Mainlines); nineteen metering and regulating

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1 15 U.S.C. § 717f(c) (2012).

2 18 C.F.R. Parts 157, 284 (2014).

3 *Id.* at Part 157, Subpart A.

4 The ten Supply Laterals are: the Sherwood Lateral; the Columbia Gas Transmission ("CGT") Lateral; the Seneca Lateral; the Berne Lateral; the Clarington Lateral; the Majorsville Lateral; the Cadiz Lateral; the Burgettstown Lateral; and Supply Connector Lateral Lines A and B. The three Mainlines are: parallel Mainlines A and B; and the Market Segment.

facilities; and other ancillary facilities (all facilities collectively referred to as the "Rover Pipeline" or "Project"); (b) approval of the *pro forma* FERC NGA Gas Tariff ("Tariff") submitted herewith, which includes the authority to enter into negotiated rate agreements; and (c) approval of the initial recourse rates for service; and

(2) Blanket certificates authorizing Rover to: (a) engage in certain self-implementing routine activities pursuant to blanket certificate authority under Part 157, Subpart F of the Commission's regulations;[5] and (b) transport natural gas on an open-access and self-implementing basis under Part 284, Subpart G of the Commission's regulations.[6]

Rover also requests any waivers that may be necessary for approval of the Application and the services proposed herein, including waiver of the Commission's shipper-must-have-title policy in order for Rover to acquire off-system capacity on third-party pipeline systems consistent with Commission policy.[7]

Rover respectfully requests that the Commission issue a final order approving the authorizations requested herein by no later than November 2015. Granting the requested authorizations by November 2015 will allow Rover to commence construction in a timely manner and place in service certain Supply Laterals and Mainlines A and B to a new market interconnection hub known as the "Midwest Hub" in Defiance County, Ohio, by December 2016 to meet the natural gas production schedules and delivery obligations of Rover's producer-shippers in accordance with the executed precedent agreements. As discussed below, Rover's contractual commitments further require that it construct and place in service by June 2017 the

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5 18 C.F.R. Part 157, Subpart F.

6 *Id.* at Part 284, Subpart G.

7 *See Tex. E. Transmission Corp.*, 93 FERC ¶ 61,273 (2000), *reh'g & clarification denied*, 95 FERC ¶ 61,056 (2001).

remaining Supply Laterals and the Market Segment facilities commencing at the Midwest Hub and running to the pipeline terminus at an interconnect with Vector.

In support of this Application and pursuant to the Commission's regulations, Rover respectfully submits the following:

I.
EXECUTIVE SUMMARY

The Rover Pipeline originated as a result of discussions with producers in the Marcellus and Utica Shale supply areas of West Virginia, Pennsylvania and Ohio that were seeking a means to move their stranded natural gas production to markets in the Midwest and Canada as expeditiously as possible. As reflected in this Application, Rover proposes to meet the long-haul transportation needs of these producer-shippers through a combination of new greenfield pipeline construction and the acquisition of existing off-system capacity.

More specifically, Rover proposes to construct, own, and operate a new interstate natural gas pipeline system to include approximately 711 miles of Supply Laterals and Mainlines, and related compression and metering facilities, from the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to a point of interconnection with the Vector pipeline system in Livingston County, Michigan.

The Rover Pipeline is designed with dual 42-inch pipelines with the capacity to transport up to 3.25 Bcf/day of natural gas from the beginning of Mainlines A and B near the City of Leesville, in Carroll County, Ohio, to the Midwest Hub. Rover will install delivery meters at the Midwest Hub to deliver gas into Panhandle Eastern Pipe Line Company, L.P. ("Panhandle") and ANR Pipeline Company ("ANR"). To facilitate a seamless transportation path for its shippers in its Market Zone South in a cost-effective manner that minimizes duplication of facilities and environmental impacts, Rover has executed precedent agreements with Panhandle and Trunkline

Gas Company, LLC ("Trunkline Gas") for firm transportation capacity.[8] By using existing capacity on the Panhandle and Trunkline Gas pipelines, Rover will deliver approximately 750,000 dekatherms per day ("Dth/day") to Panhandle, which will redeliver volumes via backhaul to Trunkline Gas' Zone 1A.[9] Rover will also be capable of delivering up to approximately 1.7 Bcf/day to ANR.

From the Midwest Hub, the Rover Pipeline is designed with a single 42-inch pipeline—the Market Segment—with the capacity to transport up to 1.3 Bcf/day of natural gas to a proposed interconnection with the Vector system in Livingston County, Michigan. Rover has executed a joint precedent agreement with Vector and its interconnected affiliated pipeline, Vector Pipeline Limited Partnership ("Vector Canada"), for up to 950,000 Dth/day of firm transportation capacity in order that Rover may provide transportation service to those producer-shippers in its Market Zone North requesting deliveries in Michigan under Rover's Rate Schedules FTS and ITS, as well as deliveries to the Union Gas Dawn Hub in Ontario, Canada ("Dawn Hub"). Additionally, Rover has contracted with Panhandle to deliver additional volumes to the U.S./Canada International Boundary at the Union Ojibway interconnect for further redelivery to the Dawn Hub via the Union Gas Limited system.

Rover is also installing an interconnect in the Supply Zone that will be capable of making deliveries into the CGT system in Doddridge County West Virginia to allow for service to markets in the Gulf Coast, Southeast and East Coast.

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[8] All associated off-system transportation costs for transportation service rendered in the U.S. will be recovered by Rover through its recourse rates. Fuel costs will be a direct charge to the shipper. The precedent agreements executed by Rover for off-system transportation are being submitted as Privileged Information in Exhibit Z-2 hereto.

[9] Panhandle and Trunkline are filing applications concurrently for authorization to construct and operate compression modifications to allow for backhaul transportation. See Section XV. Also, see attached Trunkline Gas Tariff Map included in Exhibit Z-1 hereto.

In its pre-filing request filed in Docket No. PF14-14-000,[10] Rover had initially indicated its intent to build, among other facilities, a 42-inch pipeline from the Midwest Hub to the Dawn Hub. However, on January 27, 2015, Rover executed a precedent agreement with Vector and Vector Canada for firm transportation service of up to 950,000 Dth/day for deliveries in Michigan and at the Dawn Hub. Rover entered into this transportation arrangement with Vector and Vector Canada for several reasons. First, it enables Rover to avoid construction of approximately 110 pipeline miles in Michigan and approximately 14 pipeline miles in Canada, and the associated impacts to the regions' environmental resources, residences, and private property. Second, Rover's transportation of a portion of its shippers' gas on the Vector system maximizes the use of available and existing pipeline capacity, and enables Rover to take advantage of Vector's existing connections with local distribution companies, vast Michigan storage facilities, and other end users in Michigan and Chicago, as well as Vector Canada's interconnection with the Dawn Hub.[11] Finally, along with providing producer-shippers enhanced market outlets, Rover's use of capacity on Vector and Vector Canada will provide these regions with enhanced access to the abundant supply of natural gas originating from the Marcellus and Utica shale supply areas.

While natural gas deliveries in Canada are beyond the Commission's jurisdiction, in order to provide the Commission a complete picture of the wide-ranging benefits of the Project, Rover notes that producer-shippers taking their gas to the Dawn Hub will have multiple options

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[10] Request to Initiate the FERC Pre-Filing Review Process, *ET Rover Pipeline Co. LLC*, FERC Docket No. PF14-14-000 (June 26, 2014).

[11] Vector's Michigan and Vector Canada's Ontario delivery points are as follows: Bluewater Gas Storage (Lenox, Michigan); Consumers Energy Company (Hartland, Michigan); Consumers Energy Company (Ray, Michigan); DTE Gas Company (Belle River Mills, Michigan); DTE Gas Company (Milford Junction, Michigan); Jackson, Michigan (550 MW); DTE Gas Company (Belle River Mills, Michigan); DTE Gas Company (Milford Junction, Michigan); Jackson, Michigan (550 MW); Washington 10 (Romeo, Michigan); Greenfield Energy Centre, Ontario (1010 MW); Union (Dawn, Ontario); Union (Courtright, Ontario); and Enbridge Gas Distribution (Sombra, Ontario).

concerning final placement and pricing of their gas. At the Dawn Hub their gas can be: (1) stored at multiple facilities in the area; (2) sold in the local Canadian market; (3) sent to U.S. Northeast markets on TransCanada Corporation pipelines; or (4) sent back into the local Michigan or Chicago markets on other pipelines from the Dawn Hub.

The Rover Pipeline represents an approximately $4.22 billion capital investment in much-needed U.S. energy infrastructure that: (1) responds to market demand for additional firm take-away capacity from the Marcellus and Utica shale supply areas, as evidenced by the significant long-term 15 and 20-year contractual commitments to the Project by producer-shippers; (2) supports overall development of domestic natural gas resources, thereby ensuring domestic energy supplies can grow to meet energy and related national security needs in the United States; and (3) enhances the reliability of the interstate natural gas pipeline grid in a geographic region that serves as a critical junction between sources of natural gas production from the Marcellus and Utica shale supply areas and market demand in the Midwest, Michigan, Gulf Coast, Canadian, and U.S. Northeast markets.

The proposed construction and in-service schedules for the Rover Pipeline are driven by the take-away capacity needs of Marcellus and Utica shale gas producer-shippers that have committed to the Project. In an effort to begin addressing these needs at the earliest date possible, Rover proposes to commence service on a portion of the Supply Laterals (the Seneca, Clarington, and Cadiz Laterals) and the entirety of Mainlines A and B to the Midwest Hub by December 2016. The second construction phase of the Project, which entails construction of those facilities from the Midwest Hub to the interconnection with Vector, as well as the remaining Supply Laterals, is scheduled to be completed and placed in service by June 2017. Significant resources have been expended to date and committed for future expenditure by Rover

and its producer-shippers based on an in-service date of December 2016 for the Supply Laterals and Mainlines A and B. Because an in-service date of December 2016 is critical to certain shipper commitments, Rover is requesting issuance of the certificate authorization as proposed herein by November 2015.

Rover is aware that it is proposing an ambitious schedule, and that the Commission requires a complete record in order to meet this schedule. Through its participation in the Commission's Pre-Filing Review Process, Rover has identified and resolved many issues of potential concern, such as route alternatives, environmental matters, and special construction needs. Most notably, Rover has entered into a precedent agreement with Vector and Vector Canada that will enable Rover to meet its commitments to its shippers in an efficient, cost-effective manner that eliminates duplication of facilities and minimizes environmental impacts. Rover is committed to continuing to engage with stakeholders in order to address and resolve issues as they may arise, and thus to facilitate the Commission's review of the Project. The Environmental Report, included herewith as Exhibit F-I, demonstrates that the Rover Pipeline has been sited first to avoid, and then to minimize environmental impacts, as well as to minimize landowner impacts.

The Environmental Report also demonstrates that the Rover Pipeline has been designed using state-of-the-art construction techniques and equipment to satisfy all applicable safety and security requirements, and to minimize impacts on the environment. In particular, Rover has undertaken to design the Project so that it may operate in a manner that minimizes air emissions, including emissions of greenhouse gases. Finally, the Project satisfies the policy goals established in the Commission's Certificate Policy Statement ("FERC Policy Statement")

addressing new interstate natural gas pipeline facilities.[12] Because Rover is a new pipeline company, it has no existing customers who may be adversely affected by costs or risks of recovery of costs of the proposed Rover Pipeline facilities. The economic risks of the Project will be borne fully by Rover.

For the foregoing reasons, and as described more fully herein, the Project is required by the public convenience and necessity in satisfaction of the requirements of NGA Section 7(c).[13] Accordingly, Rover requests that the Commission grant all authorizations required to construct, own, and operate the Rover Pipeline as proposed herein by November 2015.

II.
INFORMATION REGARDING THE APPLICANT

The exact legal name of the applicant is Rover Pipeline LLC. Rover is a limited liability company that is organized and exists under the Delaware Limited Liability Act, with its principal offices located at 1300 Main Street, Houston, Texas 77002. Rover is jointly owned by ET Rover Pipeline, LLC ("ET Rover"), and AE-Midco Rover, LLC and AE-Midco Rover II, LLC. ET Rover is the majority interest owner, developer, and will be the operator of the Project.

Rover currently does not own any pipeline facilities, nor is it currently engaged in any natural gas transportation operations. Upon acceptance of the certificate authority sought in this Application and the commencement of service authorized thereunder, Rover will be subject to the Commission's jurisdiction under the NGA as a natural gas company. Rover will provide

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[12] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999); *Order Clarifying Statement of Policy*, 90 FERC ¶ 61,128 (2000); *Order Further Clarifying Statement of Policy*, 92 FERC ¶ 61,094 (2000).

[13] 15 U.S.C. § 717f(c).

transportation service pursuant to its Tariff on an open-access and self-implementing basis under Part 284, Subpart G of the Commission's regulations.[14]

III.
CORRESPONDENCE AND COMMUNICATIONS

The names, titles, mailing addresses, telephone numbers and email addresses of those persons to whom all communications concerning this Application are to be directed are:

Mr. Stephen T. Veatch[15] [16]
Senior Director, Certificates,
Energy Transfer Partners, L.P.
1300 Main Street
Houston, Texas 77002
(713)-989-2024
Stephen.Veatch@energytransfer.com

Mr. Kelly Allen[16]
Manager, Regulatory Affairs
Energy Transfer Partners, L.P.
1300 Main Street
Houston, Texas 77002
(713) 989-2606
Kelly.Allen@energytransfer.com

Ms. Lisa M. Tonery[16]
Ms. Tania S. Perez
Norton Rose Fulbright US LLP
666 Fifth Avenue
New York, N.Y. 10103
(212) 318-3009
lisa.tonery@nortonrosefulbright.com
tania.perez@nortonrosefulbright.com

Mr. Michael Langston[16]
Vice President & Chief Regulatory Officer
Energy Transfer Partners, L.P.
1300 Main Street
Houston, Texas 77002
(713)-989-7610
Michael.Langston@energytransfer.com

Mr. Joey Mahmoud[16]
Senior Vice President, Engineering
Energy Transfer Partners, L.P.
1300 Main Street
Houston, Texas 77002
(713)-989-2710
Joey.Mahmoud@energytransfer.com

[14] 18 C.F.R. Part 284, Subpart G.

[15] Designated as the responsible Rover official under Rule 154.7(a)(2) of the Commission's regulations, *id.* at § 154.7(a)(2).

[16] Designated to receive service pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure, *id.* at § 385.2010. Rover respectfully requests that the Commission waive Rule 385.203(b)(3), *id.* at § 385.203(b)(3), in order to allow Rover to include each of the designated representatives on the official service list.

IV.
DESCRIPTION OF FACILITIES

The Rover Pipeline will consist of approximately 711 miles of 24-inch, 30-inch, 36-inch, and 42-inch pipelines in West Virginia, Pennsylvania, Ohio, and Michigan, with associated surface facilities that include compressor stations, metering and regulating stations, and other ancillary facilities.

A. Pipelines

The Project's proposed pipelines consist of ten Supply Laterals and three Mainlines (Mainlines A and B, and the Market Segment). Generally, the Supply Laterals will deliver gas from receipt points in the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to delivery points along Mainlines A and B, which will run parallel (for most of their length) from Harrison County, Ohio to the Midwest Hub in Defiance County, Ohio. The Market Segment will run from the Midwest Hub north to the interconnection with Vector in Livingston County, Michigan. The proposed pipelines are depicted on the General Project Location Map included as Exhibit F hereto. Proposed pipeline lengths and diameters are summarized in the following table.

Pipelines		
Pipeline Segment	**Pipeline Diameter (inches)**	**Approximate Length (mi)**
Supply Laterals	24, 30, 36, and 42	237.3
Mainline A	42	190.6
Mainline B	42	183.3
Market Segment	42	100.0
Total Pipeline Miles		**711.2**
Mainlines A and B will be installed approximately 20 feet apart.		

Specifically, the Supply Laterals will consist of approximately 237 miles of 24-inch, 30-inch, 36-inch and 42-inch pipelines, and will receive processed natural gas at the tailgate from various processing plants, or from interconnects with other pipeline systems.[17] These processed natural gas supplies will be pressurized at supply compressor stations, which will move the gas into Mainlines A and B at the Mainline Compressor Station 1 in Carroll County, Ohio.

Mainlines A and B will include approximately 374 miles of dual 42-inch diameter pipelines to be installed in the same right-of-way approximately 20 feet apart. They will commence at the tailgate of Mainline Compressor Station 1, where the gas stream in Mainlines A and B will be pressurized up to a Maximum Operating Pressure of 1,440 pounds per square inch gauge, and the total capacity will be up to 3.25 Bcf/day to the Midwest Hub.[18] From Mainline Compressor Station 1, the gas will be moved to Mainline Compressor Station 2 in Wayne County, Ohio, then onward to Mainline Compressor Station 3 in Crawford County, Ohio, and then to the Midwest Hub. At the Midwest Hub, Rover will have delivery facilities at interconnects with Panhandle and ANR. The Panhandle and ANR metering facilities will consist of metering, regulating, and other components capable of delivering up to 1.1Bcf/day and 1.7 Bcf/day, respectively.

Exiting the Midwest Hub, the Rover Pipeline will downsize to a single 42-inch diameter, approximately 100-mile pipeline with a total capacity of 1.3 Bcf/day, designated as the Market Segment. The Market Segment will commence at the Midwest Hub, extend north into Livingston County, Michigan, and terminate at the interconnection with Vector. The Market Segment will include construction of a delivery meter station and interconnect with Vector.

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[17] All natural gas delivered into Rover Pipeline will be processed natural gas in compliance with the quality standards under the General Terms and Conditions of Rover's Tariff.

[18] Mainline B terminates approximately 7.3 miles east of the Midwest Hub, at which point it crosses over and interconnects with Mainline A.

B. Compression

Rover proposes to construct six compressor stations on the Supply Laterals, three compressor stations on Mainlines A and B, and one compressor station on the Market Segment. The proposed compressor stations are depicted on the General Project Location Map included as Exhibit F hereto. The six Supply Lateral compressor stations will have a total nameplate rating of 72,645 horsepower ("HP"), and will be located near the receipt point of the corresponding Supply Lateral, to ensure system pressure for the gas streams entering Mainlines A and B in Carroll County, Ohio. The four compressor stations along Mainlines A and B and the Market Segment will have a total nameplate rating of 140,775 HP. Facilities at each compressor station site will include natural gas-fired compressors, a compressor building with acoustic mitigation if required, an office/control/utility building, a storage/maintenance building, gas and utility piping, separators, gas coolers and heaters (at some locations), safety equipment, an emergency generator, and parking areas. Proposed compressor station locations and nameplate capacities are summarized in the following table.

Compressor Station Facilities			
Pipeline Segment	**Station Name**	**County, State**	**Nameplate Rating (HP)**
Supply Laterals			
Sherwood Lateral	Sherwood Compressor Station	Doddridge, WV	14,205
Seneca Lateral	Seneca Compressor Station	Noble, OH	18,940
Clarington Lateral	Clarington Compressor Station	Monroe, OH	11,245
Majorsville Lateral	Majorsville Compressor Station	Marshall, WV	7,100
Cadiz Lateral	Cadiz Compressor Station	Harrison, OH	15,980
Burgettstown Lateral	Burgettstown Compressor Station	Washington, PA	5,175
Supply Laterals Subtotal			**72,645**

Compressor Station Facilities			
Pipeline Segment	**Station Name**	**County, State**	**Nameplate Rating (HP)**
Mainlines A and B			
Mainlines A and B	Mainline Compressor Station 1	Carroll, OH	42,190
Mainlines A and B	Mainline Compressor Station 2	Wayne, OH	38,745
Mainlines A and B	Mainline Compressor Station 3	Crawford, OH	34,010
	Mainlines A and B Subtotal		**114,945**
Market Segment	Defiance Compressor Station	Defiance, OH	25,830
	Project Total		**213,420**

C. Receipt and Delivery Meter Facilities

Nineteen meter stations consisting of eleven receipt meters, six delivery meters, and two bidirectional meters will be installed to measure the receipt and delivery of natural gas, and will be sized based upon anticipated volume flow. Seven of the nineteen meter stations will be installed within the new compressor station locations, while the remaining twelve will be installed adjacent to or within the permanent pipeline right-of-way on land that will be acquired for operation of the facilities. Fifteen of the nineteen meter stations will be located along the Supply Laterals, including eleven receipt meters that will be located either at the tailgate of processing plants or at interconnects with intrastate pipeline systems that collect processed natural gas supplies requiring long-haul transportation to market hubs. The receipt and delivery meters are sized based upon anticipated volume flow. The six delivery meters (two along the Supply Laterals and four along the Mainlines) will be installed at interconnects with CGT, the Rockies Express Seneca Lateral, Panhandle, ANR, Consumers Energy Company, and Vector. The two bidirectional meters will be installed at the Clarington Compressor Station on the Clarington Lateral. Specific locations are provided in Table 1.3-4 of Resource Report 1, General

Project Description, provided as part of the Environmental Report that is included as Exhibit F-1 hereto.

Typical equipment installed at each meter station will include a supply line, emergency bypass line, meter runs, pressure regulation, overpressure protection, gas heaters, control buildings, and a discharge line. Electrical power will be provided for building cooling, lighting, ventilation, and control equipment. A small satellite dish may be installed for Supervisory Control and Data Acquisition ("SCADA"). Telephone or cellular service also will be required for voice communications and SCADA backup.

D. Construction Schedule

Rover plans to commence construction in January 2016, pending receipt of all applicable permits and clearances. In order to meet the production and delivery schedules of its shippers, a portion of the Supply Laterals and Mainlines A and B are scheduled to be placed in service in December 2016. The Market Segment and the remaining Supply Laterals are scheduled to be placed in service no later than June 2017.

Specific descriptions and locations of the proposed Project facilities, as well as of the construction and installation activities, are set forth in Resource Report 1, General Project Description, provided as part of the Environmental Report that is included as Exhibit F-1 hereto.

V.
MARKET DEMAND AND OPEN SEASON

Development of the Rover Pipeline has been driven by significant increases in domestic natural gas production, specifically in the Marcellus region. Rover has entered into precedent agreements with nine producers, so that the Project is currently subscribed through 15- and 20-year contracts to transport 3.1 Bcf/day of the 3.25 Bcf/day available capacity.

A. Overview of the Marcellus Shale Gas Supply

Natural gas produced in the Marcellus Shale formation, primarily in Pennsylvania and West Virginia, accounts for almost 40% of all U.S. shale gas production, and has increased significantly over the past four years, from 2 Bcf/day in 2010 to roughly 15 Bcf/day in 2014.[19] The Marcellus region is now the largest producing basin in the United States; it is estimated that production will exceed 16.5 Bcf/day in February 2015.[20] Natural gas marketed production in 2013 in Pennsylvania alone averaged nearly 9 Bcf/day, second only to Texas among U.S. states.[21]

Indeed, Marcellus production growth has outpaced growth in the region's available pipeline takeaway capacity. As a result, natural gas prices have been affected:

> Price hubs in the central and northeast portions of the Marcellus region, where natural gas production has been higher, and pipeline capacity to bring it to other markets has been more limited, have seen lower prices compared to hubs around southern and western portions of the Marcellus. The large amount of backed-up supply also makes Appalachian spot prices more volatile, and can cause them to drop by as much as $1 [per million British Thermal Units ("MMBtu")] on moderate temperature days when Northeast demand is low.[22]

Further, "[p]roduction in the Marcellus region surpassed winter demand for natural gas in Pennsylvania and West Virginia several years ago, and is now on track to be enough to equal the demand in those states plus New York, New Jersey, Delaware, Maryland, and Virginia combined."[23]

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19 U.S. Energy Info. Admin. ("EIA"), *Today in Energy: Marcellus Region Production Continues Growth* (Aug. 5, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=17411 (last visited Jan. 16, 2015).

20 *See* EIA, *Drilling Productivity Report: For Key Tight Oil and Shale Gas Regions,* 6 (Jan. 2015), http://www.eia.gov/petroleum/drilling/archive/dpr_jan15.pdf (last visited Feb. 11, 2015).

21 *See* EIA, *Natural Gas Gross Withdrawals and Production: Marketed Production,* http://www.eia.gov/dnav/ng/ng_prod_sum_a_epg0_vgm_mmcf_a.htm (last visited Jan. 16, 2015).

22 EIA, *Today in Energy: Some Appalachian Natural Gas Spot Prices Are Well Below the Henry Hub National Benchmark* (Oct. 15, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=18391 (last visited Jan. 16, 2015).

23 *See* EIA, *Today in Energy: Marcellus Region Production Continues Growth* (Aug. 5, 2014), http://www.eia.gov/todayinenergy/detail.cfm?id=17411 (last visited Jan. 16, 2015).

These market dynamics are expected to dramatically alter natural gas transportation patterns in the United States. The EIA, in its *Annual Energy Outlook 2014* ("*AEO 2014*"), recognized the need for Marcellus supply to be transported to other markets. Per *AEO 2014*, "Marcellus shale gas production could provide up to 39% of the natural gas needed to meet demand in markets east of the Mississippi River [from 2022 to 2025]—up from 16% in 2012."[24] Marcellus natural gas production exceeds 100% of the *AEO 2014* Reference Case's projected demand for the New England and Mid-Atlantic regions from 2016 through 2040, and by more than 1.0 trillion cubic feet during the peak production period (2022–2025).[25]

B. Open Season for the Rover Pipeline

Rover representatives met with potential shippers to explore their interest in supporting new natural gas pipeline infrastructure serving the Marcellus and Utica shale supply areas. As a result of these discussions, Rover initially executed eight precedent agreements that included pre-arranged conforming bids. These initial eight executed precedent agreements were for terms of 15 or 20 years, and substantially subscribed the proposed pipeline capacity. Rover subsequently conducted a thirty-day binding Open Season commencing on June 26, 2014. The results of this Open Season did not yield any additional executed precedent agreements. Both negotiated and recourse rates were offered. After the end of the Open Season, Rover continued to solicit interest for capacity on the Project; and, on October 30, 2014, Rover announced that it had secured an additional long term binding precedent agreement. As a result of executed precedent agreements, the Rover Pipeline Project is subscribed to 3.1 Bcf/day with 15- and 20-

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[24] EIA, *Annual Energy Outlook 2014 with Projections to 2040*, MT-25 (Apr. 2014), *available at* http://www.eia.gov/forecasts/aeo/pdf/0383(2014).pdf.

[25] *Id.*

year contracts. Rover anticipates the remaining 0.15 Bcf/day of firm capacity will be subscribed to in the near future.

Exhibit I contains copies of the executed precedent agreements. Rover is filing the precedent agreements as Privileged and Confidential information, and requests such treatment pursuant to Section 388.112 of the Commission's regulations.[26]

VI.
PRECEDENT AGREEMENTS

The precedent agreements that support the Rover Pipeline are the product of extensive negotiations with producer-shippers in a highly competitive environment. As with any pipeline project that is linked directly to natural gas supply, producer-shippers in the Marcellus and Utica shale supply areas have sought those transportation service options that best address the specific circumstances and requirements of each shipper, and provide the contractual incentives necessary for each of them to make a binding commitment to the Rover Pipeline. Ultimately, Rover and its shippers were able to secure the contractual foundations for the Project.

Recognizing the magnitude of the Project, and the consequent need to secure large capacity commitments, Rover designed its open season to provide incentives for shippers to make large, long-term firm transportation commitments. Thus, the open season offered greater benefits, in terms of transportation rate and other rate-related contractual benefits, to shippers based on the quantity of firm transportation commitment. Precedent agreements for the Rover Pipeline were accordingly entered into with four categories of shippers (collectively, the "Initial Shippers"). (All potential shippers were provided an equal opportunity in the open season to

[26] 18 C.F.R. § 388.112 (2014).

obtain the benefits and rights of each shipper category.) The four categories of Initial Shippers are:

- Cornerstone Shipper: a shipper that has contracted, prior to the in-service date of the Rover Pipeline, for capacity commitments equal to 500.000 Dth/day or more for a primary term of at least 15 years:
- Foundation Shipper: a shipper that has contracted, prior to the in-service date of the Rover Pipeline, for capacity commitments equal to 150,000 Dth/day or more for a primary term of at least 20 years;
- Anchor Shipper: a shipper that has contracted, prior to the in-service date of the Rover Pipeline, for capacity commitments equal to 100.000 Dth/day or more for a primary term of at least 15 years;
- Negotiated Rate Shipper: a shipper that has contracted, prior to the in-service date of the Rover Pipeline, for capacity and does not meet the criteria to be a Cornerstone, Anchor Shipper, or Foundation Shipper.

A. Initial Shipper Rights

The precedent agreements generally afforded the following rights to each category of Initial Shipper:

1. Cornerstone Shipper Rights

Generally, the most beneficial negotiated reservation rates and rate-related contractual rights were granted to Cornerstone Shippers. An executed precedent agreement was considered as a prearranged conforming bid that was not subject to prorationing during the open season. Cornerstone Shippers were also given the option to increase their maximum daily quantity ("MDQ") up to a specified amount by a certain date. In addition, Cornerstone Shippers were granted Most Favored Nations Status, as more fully described below. As with other categories of Initial Shippers, the precedent agreements for Cornerstone Shippers included a form of negotiated rate agreement providing a fixed negotiated reservation rate and fixed negotiated commodity rate in lieu of the otherwise effective maximum reservation rate and maximum commodity rate, respectively. The form of negotiated rate agreement included a right of first

refusal ("ROFR") at the end of the FTS agreement's primary term or any extension thereof, and also included a fuel cap as more fully described below.

2. Foundation Shipper Rights

For Foundation Shippers, an executed precedent agreement was likewise considered as a prearranged conforming bid that was not subject to prorationing during the open season. Foundation Shippers were given the opportunity to participate in the design of the sizing of metering facilities. They were granted a ROFR, and their form of negotiated rate agreements provided for a fixed negotiated reservation rate and fixed negotiated commodity rate, as well as for a fuel cap.

3. Anchor Shipper Rights

For Anchor Shippers, an executed precedent agreement was again considered as a prearranged conforming bid that was not subject to prorationing during the open season, and included a form of negotiated rate agreement providing for a fixed negotiated reservation and commodity rate, and for a fuel cap. Anchor Shippers were also granted a ROFR.

4. Negotiated Rate Shipper Rights

The Negotiated Rate Shipper's precedent agreement included a form of negotiated rate agreement providing for a fixed negotiated reservation rate in lieu of the otherwise-effective maximum reservation rate, as well as for a fuel cap. The Negotiated Rate Shipper also has a ROFR.

Additionally, the precedent agreements contain provisions that address the particular circumstances and requirements of each of the Initial Shippers, and provide the contractual incentives that were necessary for each Initial Shipper in entering a binding commitment to the Rover Pipeline. It is important to emphasize however, that the provisions do not define or affect the nature of service under Rover's Tariff. For the most part, the provisions of each precedent

agreement define the applicable negotiated rates, set forth standard contractual rights and obligations of the parties under the precedent agreement itself, and spell out certain shipper precedent conditions that will be eliminated prior to the in-service date of the Rover Pipeline consistent with Commission policy and precedent. For example, certain shippers required a ramp-up of MDQ rights prior to the in-service date of the Rover Pipeline to ensure that they could execute a binding precedent agreement at a time when their production profiles were not yet fully identified. In other instances, the conditions address the MDQ in part, but not the entire Rover Pipeline path prior to full in-service.

B. Material Non-Conforming Provisions

Material non-conforming provisions in the precedent agreements intended to survive the execution of transportation agreements, and for which Commission approval is requested herein, are described generally below.

It must be noted that, absent the contractual commitments under the precedent agreements, the Rover Pipeline could not go forward. Rover recognized early in the planning stages that a project of this scale would only proceed if the project could attract relatively large, long-term commitments. Thus, as compared to each of the Initial Shippers, other shippers or potential shippers cannot be viewed as similarly situated. Under the Commission's existing negotiated rate and discount policies, project sponsors may rely on a variety of rate incentives to induce potential customers to commit to a project, and may distinguish among various shippers according to factors such as the size of the commitment, the timing of the commitment, the length of the contract, and elasticities of demand.[27] Additionally, none of the provisions in the

[27] *See Revisions to the Blanket Certificate Regulations and Clarification Regarding Rates,* Order No. 686, 117 FERC ¶ 61,074 (2006), *order on reh'g and clarification*, Order No. 686-A, 119 FERC ¶ 61,303 (2007), *order on reh'g*, Order No. 686-B, 120 FERC ¶ 61,249 (2007); *Gulf Crossing Pipeline Co. LLC*, 123 FERC ¶ 61,100, at P 41; *see also Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commissions Regulations and Regulation of Natural Gas Pipelines After*

precedent agreements affects the actual terms or quality of service on the Rover Pipeline. Therefore, none of these contract provisions creates the risk of undue discrimination under the Commission's policy regarding material deviations.[28] Based on the foregoing, Rover respectfully submits that no provision of any precedent agreement is unduly discriminatory.[29] For these reasons, Rover does not believe that any aspect of the precedent agreements results in an impermissible material deviation from the *pro forma* service agreements contained in the Rover Tariff. If the Commission determines that a deviation exists, that deviation should be acceptable and not material. In particular, Rover requests Commission approval for the following specific provisions that would be reflected in the Initial Shippers' FTS agreements, and would be effective for various periods after the in-service date of the Rover Pipeline.[30]

1. Fuel Caps

All Initial Shippers' precedent agreements establish a cap on the fuel and lost and unaccounted ("LUAF") for gas costs that may be recovered. The cap represents a negotiated fuel

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Partial Wellhead Decontrol, Order No. 636, 59 FERC ¶ 61,030 (1992), *reh'g*, Order No. 636-A, 60 FERC ¶ 61,102 (1992), *reh'g*, Order No. 636-B, 61 FERC ¶ 61,272 (1992), *aff'd in relevant part, Utd. Distribution Cos. v. FERC*, 88 F.3d 1105 (D.C. Cir. 1996), *on remand*, Order No. 636-C, 78 FERC ¶ 61,186 (1997), *reh'g denied*, Order No. 636-D, 83 FERC ¶ 61,210 (1998); *Regulation of Short-Term Natural Gas Transportation Services, and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, 90 FERC ¶ 61,109 (2000), *reh'g*, Order No. 637-A, 91 FERC ¶ 61,169 (2000), *reh'g denied*, Order No. 637-B, 92 FERC ¶ 61,062 (2000), *granted in part, den'd in part, dismissed in part, INGAA v. FERC*, 285 F.3d 18 (D.C. Cir. 2002).

[28] *See Trailblazer Pipeline Co. LLC*, 149 FERC ¶ 61,176, at P 5 (2014) ("A material deviation may be permissible if the Commission finds that such deviation does not constitute a substantial risk of undue discrimination."); *see, e.g., Enbridge Pipeline (S. Lights) LLC*, 144 FERC ¶ 61,044, at P 13 (2013) ("The Commission again confirmed that as all potential shippers had been afforded the opportunity to sign up for the Committed Rates, there was no issue of undue discrimination as between committed and uncommitted shippers.").

[29] *See, e.g., CenterPoint Energy Gas Transmission Co.*, 104 FERC ¶ 61,280, at P 7 (2003) (permitting non-conforming deviation reflecting "unique status of shipper that does not affect its service or others" and permitting pipelines to negotiate non-conforming rates "so long as the shipper has the option of choosing recourse service from the pipeline") (citing *Tenn. Gas Pipeline Co.*, 97 FERC ¶ 61,225, 62,029 (2001)and *ANR Pipeline Co.*, 97 FERC ¶ 61,223, 62016 (2001)); *see also Gulfstream Nat. Gas Sys. L.L.C.*, 100 FERC ¶ 61,036, at P 15 (2002) (noting that there are permissible material deviations that do not entail a risk of undue discrimination).

[30] In accordance with Commission policy, Rover will file its FTS agreements with the initial shippers, along with all non-conforming provisions related thereto, and the initial shippers' negotiated rate agreements, prior to commencement of service.

arrangement, which is permissible under Commission policy.[31] Also, consistent with Commission policy, Rover will calculate fuel and lost and unaccounted for gas percentages on the assumption that full fuel and lost and unaccounted for gas recovery is achieved from all shippers. Hence, no other shipper will be subsidizing these negotiated rate arrangements.

2. Most Favored Nations Rights

Cornerstone Shippers have included in their precedent agreement a Most Favored Nations right. Subject to the provisions of the pertinent precedent agreement, if, at any time prior to the fifth anniversary of the in-service date, Rover enters into a precedent agreement, FTS agreement, or similar agreement, with more favorable conditions precedent, termination provisions, minimum pressure requirements, or with a negotiated rate, discounted rate, or recourse rate that is lower than the negotiated rate in the shipper's negotiated rate agreement for any current or future receipt or delivery point on the same transportation path and the same or shorter term (other than a transportation agreement for seasonal service or with a term of less than one year), Rover shall offer such more favorable terms and conditions to the shipper, and shall offer to reduce the shipper's negotiated rate for service under the FTS agreement to a rate equal to the lower rate. Rover has negotiated this provision with the Cornerstone Shippers in recognition of the substantial business risk these shippers have incurred as supporters of the Project. This provision is consistent with other proceedings where the Commission has permitted shippers to hold Most Favored Nations contract provisions in return for their support of a project.[32]

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[31] *See Fla. Gas Transmission Co.*, 93 FERC ¶ 61,203, at pg. 24 (2000) (citing *NorAm Gas Transmission*, 77 FERC ¶ 61,011, 61,036 (1996)).

[32] *See, e.g.*, *Ruby Pipeline, L.L.C.*, 128 FERC ¶ 61,224, at P 83 (2009); *Colo. Interstate Gas Co. and Cheyenne Plains Gas Pipeline Co. LLC*, 106 FERC ¶ 61,275, at P 39 (2004).

3. Extension Rights

Certain shippers have the unilateral right to extend the term of their FTS agreement beyond its primary term. This right allows for up to four consecutive five-year renewal periods and for a portion or all of its MDQ. The shipper must provide a request to Rover for such extension at least six months prior to the expiration of the primary term or any extended term.

4. Reduction Rights

Certain shippers have the unilateral right to reduce their MDQ if Rover is unable to provide transportation service to the Dawn Hub by a specified date.

VII.
RATES, COST AND FINANCING

A. Recourse Rates

The proposed initial maximum and minimum recourse reservation and usage rates are set forth for Rate Schedules FTS, ITS and GPS, including fuel reimbursement percentages, which include LUAF, in Part IV of the proposed Rover Tariff. The Initial Shippers have elected to pay negotiated rates for transportation on the Rover Pipeline. Under the Commission's Alternative Rate Policy Statement, if a pipeline enters into negotiated rate agreements, the pipeline must provide recourse rates as an alternative.[33] Details of the negotiated rate authority under which the shippers made these elections are contained in Rate Schedule FTS, Section 3.8, and the General Terms and Conditions ("GT&C") Section 16 sets out the discounting provisions applicable to Rover's maximum recourse rates.

Rates for Transportation Service are included under Rate Schedules FTS and ITS. Supply Zone rates include service on all facilities upstream of the Mainline Zone; Supply Zone

[33] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076 (1996), *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996).

to Midwest Hub (Mainline Zone) includes service from the Supply Zone to Midwest Hub Delivery Points, including Panhandle-Defiance and ANR-Defiance; Supply Zone to Market Zone South includes service from the Supply Zone to the Midwest Hub Delivery Points, and transportation to Trunkline Gas delivery points located from Dyer County, Tennessee to Panola County, Mississippi; Supply Zone to Market Zone North includes service from the Supply Zone, to the Midwest Hub Delivery Points, to the Michigan interconnects and to the U.S./Canada International Boundary.[34]

B. Factors Used in Developing Rates

Rover has developed the proposed recourse rates in a manner consistent with the Commission's policy related to the straight-fixed-variable rate design.[35] Rover proposes two-part recourse rates for firm transportation service under Rate Schedule FTS based on the applicable cost of service. The major factors underlying the proposed firm and interruptible transportation rates include the following:

- Capital Structure 50% Debt / 50% Equity
- Cost of Debt 6.50%
- Return on Equity 13.00%
- Depreciation Rate 2.50%

[34] For those shippers who elect deliveries to the Dawn Hub, Rover will provide the Canadian leg of such service via its transportation capacity on Vector Canada. Costs associated with transportation service on Vector Canada (or any other Canadian pipeline system) will not be included in the rates for transportation service under Rover's Tariff.

[35] *See* 18 C.F.R. § 284.10; *N. Nat. Gas Co.*, 105 FERC ¶ 61,299, at P 14 (2003) (indicating Commission's preference for the straight fixed-variable rate design).

Rover's proposed return on equity and debt result in an overall rate of return of 9.75%. This capital structure is in line with what has been approved by the Commission for other new construction projects in their initial certificates.[36]

Rover is proposing to utilize a 2.50% depreciation rate. Also, for rate calculation purposes, a 2.50% depreciation rate approximates a 40-year life, which exceeds the primary terms of all of the executed precedent agreements. It also is consistent with depreciation rates accepted by the Commission in *Horizon Pipeline Co. L.L.C.*, Docket Nos. CP00-129-000 et al., *Kinder Morgan Louisiana Pipeline LLC*, Docket Nos. CP06-449-000 et al., *White River Hub, LLC*, Docket No. CP08-398-000, *Rockies Express Pipeline LLC*, Docket No. CP06-354-000, and *Tennessee Gas Pipeline Company, L.L.C.*, Docket No. CP11-161-000.[37]

C. Rate Design

Rover has utilized a straight-fixed-variable rate design in allocating costs and designing rates. Rate design units are based on the design capacity of the entire system and include an allocation of costs to interruptible services.

Rover has designed rates for Rate Schedule ITS and Authorized Overrun service based on a 100% load factor derivative of the Rate Schedule FTS reservation and usage rates, an approach that is consistent with general Commission policy.[38] The Rate Schedule GPS rate is derived from the Rate Schedule ITS rate.

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[36] *See, e.g.*, *MarkWest Pioneer, L.L.C.*, 125 FERC ¶ 61,165, at PP 26–27 (2008); *Corpus Christi LNG, L.P.* and Cheniere Corpus Christi Pipeline Co., 111 FERC ¶ 61,081, at P 33 (2005) (approving a capital structure of 50% debt and 50% equity and initial rates reflecting 14% rate of return on equity). *See also Fayetteville Express Pipeline LLC*, 129 FERC ¶ 61,235, at P 28 (2009); *T.W. Phillips Pipeline Corp.*, 126 FERC ¶ 62,132, at pg. 9 (2009).

[37] *See Horizon Pipeline Co., L.L.C.* & Nat. Gas Pipeline Co. of America, 92 FERC ¶ 61,205, at P 13 (2000); *Kinder Morgan La. Pipeline LLC* & Nat. Gas Pipeline Co. of America, 118 FERC ¶ 61,211, at P 42 (2007); *White River Hub, LLC,* 124 FERC ¶ 61,132, at P 24 (2008); *Rockies Express Pipeline LLC*, 116 FERC ¶ 61,272, at P 47 (2006); *Tenn. Gas Pipeline Co., L.L.C.*, 139 FERC ¶ 61,161, at P 21 (2012).

[38] *Cameron LNG, LLC & Cameron Interstate Pipeline LLC*, 147 FERC ¶ 61,230, at P 15 (2014); *Kinder Morgan*

Shippers under Rate Schedule GPS are charged a usage charge multiplied by the total quantity of gas either parked or borrowed each day for the account of shipper during the month. A credit has been applied to the total cost of service in order to allocate costs to interruptible transportation services, *i.e.*, interruptible transportation service, interruptible park and loan service ("GPS") and authorized overrun service under Rate Schedule FTS service. The Commission has previously recognized that a credit to the cost of service has the same effect as allocating costs to such services.[39]

Attached as Part I of Exhibit P is a Derivation of Rates, which includes the schedules and work papers supporting all of the proposed initial recourse rates for Rover Pipeline, including: maximum and minimum reservation rates; usage rates for Rate Schedule FTS; and maximum and minimum rates for Rate Schedules ITS and GPS.

Rover shippers also will be responsible for charges related to the Annual Charges Adjustment ("ACA") surcharge, when that surcharge goes into effect, and for applicable reimbursement of Fuel Gas, Booster Compression Fuel, LUAF, and incremental off-system fuel gas charges for Market Zone South. Consistent with the Commission's regulations,[40] the ACA surcharge will not be assessed initially, but will be included once the Commission bills Rover an ACA assessment.

D. Cost and Financing

Rover estimates the total capital cost of constructing the pipeline and appurtenant facilities will be approximately $4.22 billion. This cost estimate is detailed in Exhibit K. The

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La. Pipeline, LLC & Nat. Gas Pipeline Co. of America, 120 FERC ¶ 61,050, at PP 45-46 (2007); *Kinder Morgan Louisiana Pipeline LLC*, 118 FERC ¶ 61,211, at P 43 (2007) (citing *S. Nat. Gas Co. & SCG Pipeline*, 99 FERC ¶ 61,345, at P 87 (2002); *Rockies Express Pipeline LLC*, 116 FERC ¶ 61,272, at PP 43, 47 (2006).

[39] *See ETC Tiger Pipeline, LLC*, 131 FERC ¶ 61,010, at P 27 (2010); *Midcontinent Express Pipeline, LLC & Enogex Inc.*, 124 FERC ¶ 61,089, at P 93 (2008), as amended, 126 FERC ¶ 61,271 (2009).

[40] *See* 18 C.F.R. Parts 381, 382 (2014).

Allowance for Funds Used During Construction ("AFUDC") included in Exhibit K is calculated in compliance with the Commission's AFUDC policy,[41] with accruals beginning in July 2014. In accordance with the AFUDC policy, Rover affirms that it began to incur capital expenditures for the Project on June 26, 2014, and that activities necessary to prepare the Project for its intended use were in progress at that time. Rover expects to finance the Project as set forth in Exhibit L.

VIII.
PROPOSED TARIFF

Included herein as Part II of Exhibit P is a proposed Tariff prepared in conformance with the requirements of Part 154 of the Commission's regulations[42] and in consultation with the producer-shippers that have entered into precedent agreements supporting the development of the Rover Pipeline. In that regard, Rover's Tariff meets the needs of the market, and follows the Commission's requirements and policies established by Order Nos. 636[43] and 637.[44]

Under the proposed Tariff, Rover will offer firm transportation service, interruptible transportation service, and interruptible park and loan service on an open access, non-discriminatory basis pursuant to Part 284 of the Commission's regulations.[45] Rover will provide these services in accordance with proposed Rate Schedules FTS, ITS and GPS and the associated

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41 *See S. Nat. Gas Co., Se. Supply Header, LLC & S. Nat. Gas Co.*, 130 FERC ¶ 61,193, at P 36 (2010).

42 18 C.F.R. Part 154.

43 *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commissions Regulations and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 636, 59 FERC ¶ 61,030 (1992), *reh'g*, Order No. 636-A, 60 FERC ¶ 61,102(1992), *reh'g*, Order No. 636-B, 61 FERC ¶ 61,272 (1992), *aff'd in relevant part, Utd. Distribution Cos. v. FERC*, 88 F.3d 1105 (D.C. Cir. 1996), *on remand*, Order No. 636-C, 78 FERC ¶ 61,186 (1997), *reh'g denied*, Order No. 636-D, 83 FERC ¶ 61,210 (1998).

44 *Regulation of Short-Term Natural Gas Transportation Services, and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, 90 FERC ¶ 61, 109 (2000), *reh'g*, Order No. 637-A, 91 FERC ¶ 61,169 (2000), *reh'g denied*, Order No. 637-B, 92 FERC ¶ 61,062 (2000), *granted in part, den'd in part, dismissed in part, INGAA v. FERC*, 285 F.3d 18 (D.C. Cir. 2002).

45 18 C.F.R. Part 284, Subpart G.

GT&C included in the proposed Tariff. Shippers may pay either recourse rates, discounted rates, or negotiated rates for each service. The Rover Pipeline will consist of four rate zones, including the Supply Zone, the Mainline Zone, the Market Zone South, and the Market Zone North.

Certain significant provisions of the proposed Rover Tariff are summarized and discussed below:

A. Scheduling Priorities

GT&C Section 3.2 sets out detailed scheduling priorities, as follows:

- Firm (primary points to primary points);
- Firm (primary points to/from secondary points);
- Firm (secondary points within the primary path):
    - Scheduled by rate in sequence starting with the rate most proximate to the maximum rate (expressed as a percentage of the maximum rate);
- Firm (secondary points outside the primary path):
    - Scheduled by rate in sequence starting with the rate most proximate to the maximum rate (expressed as a percentage of the maximum rate);
- Interruptible service, including authorized overrun service:
    - Scheduled by rate in sequence starting with the rate most proximate to the maximum rate (expressed as a percentage of the maximum rate);
- Gas Parking Service.

These scheduling priorities afford the highest priority to service under Rate Schedule FTS, consistent with Commission policy. Such priorities assure that the firm shippers have the maximum opportunity to use any available capacity, given that they are providing the dependable revenue stream to support the Rover Pipeline through reservation charges.

B. System Management Tools

Rover Pipeline proposes system management tools, including daily scheduling penalties and cashout charges that will maintain necessary operational control on Rover Pipeline. Such

provisions are consistent with similar provisions previously approved by the Commission.[46] The nature and level of the charges reflect Rover's limited operational flexibility, given that Rover will have no storage and only limited line pack flexibility. Services available under Rate Schedule GPS will also assist shippers in avoiding penalties. The daily scheduling penalty, cashout charge and revenue crediting provisions are described briefly below:

- Daily Scheduling Penalty is described in GT&C Section 5.1. This penalty is applied when the daily variance between scheduled quantities and actual quantities at a Point of Receipt or Point of Delivery exceeds the tolerance level. To help minimize daily scheduling variances, Rover will make available to point operators continuous monitoring of Electronic Gas Measurement points.

- Imbalance Resolution/Cashout is described in GT&C Section 5.2 and provides for netting and posting (for trading) of imbalances, consistent with Commission policy. Imbalances are cashed out monthly.

- Flow Through of Cash Out Revenues and Penalties are described in GT&C Section 22. Cash out revenues in excess of costs are credited to non-offending shippers on an annual basis. A negative amount would be carried forward to the subsequent annual cash out period. Penalties in excess of costs are credited monthly to shippers who did not incur penalties during the month. The calculation for both the cash out and penalty credits is based 50% on the transportation quantity and 50% on the revenue amount of the non-offending shipper to all non-offending shippers.

C. Creditworthiness

GT&C Section 24 sets out detailed credit provisions that generally reflect those previously approved by the Commission. The credit evaluation criteria, including a potential shipper's ratings by Standards & Poor's and/or Moody's, as well as alternative means of appraisal; forms of security and collateral requirements for non-creditworthy shippers; periodic re-evaluation of creditworthiness; and procedures to address non-payment, suspension, and termination of service are detailed in the Rover Tariff.

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[46] The Commission approved similar provisions in issuing a certificate of public convenience and necessity for Energy Transfer's Tiger Pipeline. *See ETC Tiger Pipeline, LLC*, 131 FERC ¶ 61,010, at P 36 (2010).

D. Fuel Reimbursement Adjustment

GT&C Section 21 sets out procedures for a fuel tracker that includes: (1) fuel gas; (2) LUAF gas; and (3) electric compression costs. Electric compression costs are converted to gas units to determine the fuel reimbursement percentage. A Shipper's monthly fuel charges shall be the sum of the fuel charges on off-system pipelines, if applicable, plus the applicable fuel reimbursement percentage set forth in the currently effective rates for the pertinent Rate Schedule. As discussed in Section VI, above, certain Initial Shippers have negotiated a fuel gas cap in their precedent agreements. In calculating the charges under Rover's fuel gas tracking mechanism, however, full fuel recovery is assumed for such shippers' quantities, thereby assuring that there will not be subsidization for fuel gas charges by other shippers.

E. NAESB Standards

Rover is in full compliance with Commission approved North American Energy Standards Board ("NAESB") standards in effect as of the date hereof. Any changes to NAESB standards prior to the in-service date of Rover Pipeline will be incorporated into the Tariff when Rover files to make its Tariff effective. The NAESB standards are detailed in the GT&C Section 23 of the Tariff.

IX.
CERTIFICATE POLICY STATEMENT AND PUBLIC CONVENIENCE AND NECESSITY

The FERC Policy Statement[47] on certificating new pipeline construction establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The FERC Policy Statement explains that in deciding to authorize the construction of major new pipeline facilities, the Commission balances the public

[47] *See supra* note 12.

benefits against the potential adverse consequences. The Commission gives appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain on evaluating new pipeline construction.

Under the FERC Policy Statement, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. The next step is to determine whether the applicant has made efforts to minimize any adverse effect the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified, after efforts have been made to minimize them, the Commission evaluates the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. As discussed below, Rover meets each of the Commission's objectives and criteria established in the FERC Policy Statement.

A. Impact on Existing Shippers – No Subsidization

The Project will have no impact on existing customers because Rover is a new entity that has no existing operations or customers. Accordingly, there is no risk that the Rover Pipeline will rely on subsidies from existing customers. The economic risks of the Project will be borne fully by Rover.[48]

[48] *See id.*

B. No Adverse Impact on Existing Pipelines and Their Captive Customers

The Rover Pipeline, which originated as a result of discussions with producers seeking a means to move their stranded gas to markets in the Midwest and Canada, will not adversely impact existing pipelines or their captive customers. The shippers on the Rover Pipeline are producers in the Marcellus and Utica Shale supply areas that have signed 15- or 20-year contracts to meet increasing demand, and to support new infrastructure with more service flexibility. The new Rover Pipeline facilities will benefit all consumers by providing new capacity, more supplies, more competitive pricing and optionality to markets and storage. In addition, this new Rover infrastructure will provide Midwest local utilities and end users access to reliable and directly sourced gas supplies. Moreover, the Project will maximize the use of available existing pipeline capacity through transportation agreements with Panhandle, Trunkline Gas, and Vector—and thus will have a positive impact on existing pipelines.

In sum, the Rover Pipeline will not result in any adverse impact on competing pipelines and their captive customers because: (1) no existing service by any other pipeline system will be displaced; (2) no other existing pipeline system has the available capacity to transport the shipper requirements to the Midwest Hub; and (3) the transportation service provided by the Project will be utilized for new sources of natural gas supply not currently served by existing pipelines. More generally, no adverse impact on competing pipelines and their captive customers will result because: (1) the Rover Pipeline will be an open-access pipeline providing nondiscriminatory service in a competing market; and (2) construction and operation of the Rover Pipeline will serve to further enhance competition in the market by providing additional competitive service options.

C. Impact on Landowners and Communities Has Been Minimized

Based on meetings with landowners, developers, Federal, state, and local officials, and other interested stakeholders, Rover believes that it has designed and routed its Project in a manner to minimize the impact on stakeholders and the environment. Rover's routing has used existing utility corridors for siting its pipeline and available capacity on other natural gas pipelines wherever possible to avoid new, undisturbed lands. Rover has also based its routing on existing land use, locations of populated areas, surface topography, geologic considerations, and environmental factors, as well as landowner and community input. The proposed route also attempts to be in proximity to roads and highway infrastructure that will permit Rover quick access to facilities for operational and maintenance activities.

Rover intends to work with all affected landowners to address concerns as it acquires the necessary property for the proposed Project facilities. One aspect of Rover entering into the FERC's Pre-Filing Review Process was to conduct informational Open Houses to allow stakeholders to ask questions and explain their concerns to Project team members. Rover has demonstrated its willingness to work with stakeholders by addressing construction concerns and adopting reroutes suggested by affected landowners when feasible.

D. Benefits Associated with the Project Outweigh Any Adverse Impacts

As discussed throughout this Application, there are numerous public benefits associated with the Project. First, it will provide significant capital investment in much-needed natural gas infrastructure, stimulating both the local and national economies. Second, it will respond to proven market demand for additional firm take-away capacity from the Marcellus and Utica shale supply areas. Third, the Rover Pipeline supports the overall development of domestic natural gas resources, ensuring domestic energy supplies can grow to meet energy and related national security needs in the United States. Last, the Project will enhance the reliability of the

interstate natural gas pipeline grid in a geographic region that serves as a critical junction between sources of natural gas production and major areas of market demand. The public benefits of the Project far outweigh any potential minor or temporary adverse impacts.

E. The Project Is Required by the Public Convenience and Necessity

In determining whether a proposed project is required by the public convenience and necessity, the Commission considers whether the proposal meets the criteria set forth in the FERC Policy Statement. As discussed above, the Project is consistent with the objectives and criteria of the FERC Policy Statement. Furthermore, the Project will provide extensive benefits to all sectors of the natural gas market, including: (1) providing Marcellus and Utica Shale supply area producer-shippers additional access to the Midwest, Chicago, Gulf Coast, Canadian and U.S. Northeast markets; (2) creating new infrastructure for the Midwest market with direct access to a reliable and competitively-priced supply of natural gas resulting in enhanced market competition, reduced price volatility and lower prices; (3) providing new and existing electric generation facilities with greater sources of natural gas supply, in turn improving air quality and the reliability of the electric grid; and (4) using existing pipeline infrastructure in Michigan to avoid new construction impacts to Michigan's environmental resources, residences, and private property.

For these reasons, and consistent with the criteria set forth in the FERC Policy Statement, Rover respectfully submits that its proposal is in the present and future public convenience and necessity, and that the authorizations requested herein should be granted promptly.

X.
STAKEHOLDER AND LANDOWNER OUTREACH AND NOTIFICATION

Throughout the planning process for the Project, Rover engaged in outreach with landowners, elected officials, Federal, state, and local government agencies, tribal officials and

other stakeholders. This outreach resulted in the proposed route selection and general design of the Project as reflected in this Application.

Rover conducted a total of ten Open House meetings in West Virginia, Pennsylvania, Ohio, and Michigan during the week of July 8 through July 15, 2014, as well as three additional Open House meetings in Michigan from September 16 through September 18, 2014. At each Open House venue, Rover displayed a series of informational poster boards that gave an overview of the Rover Pipeline; explained the basic facts of natural gas and pipelines; summarized the proposed facilities, route and construction dates; and had map books available showing the initial proposed pipeline route, so that landowners could determine the location of the pipeline centerline in relation to their property. Approximately twenty Project team members from construction, engineering, right-of-way, geographic information systems, regulatory, and environmental departments were in attendance at each Open House, and available to answer questions. The Open Houses gave Rover the opportunity to gain valuable insights into the concerns of local community members and government agencies, and to adjust the Project construction plans accordingly.

In addition, as part of the FERC Pre-Filing Review Process, Rover has: provided two rounds of environmental Resource Reports for review and critique, participated in bi-weekly conference calls with FERC staff; provided Monthly Status Reports; participated in interagency meetings and conference calls; provided draft Resource Reports; provided several drafts of landowner, agency, and other mailing lists; conducted several route/site inspections with the FERC staff; responded to FERC staff and stakeholders' requests for information; maintained the Rover webpage; returned calls from the Rover toll-free phone number (888-844-3718) that has been established to address landowner concerns raised before, during, or after Project

construction; contacted affected landowners regarding surveys and easements; contacted affected Federal, state, local, and tribal officials; and participated in FERC-sponsored Scoping Meetings. At each FERC Scoping Meeting, Rover personnel were present to respond to questions from landowners and other stakeholders. Rover's web page at http://www.energytransfer.com/ops_etrover.aspx includes a document titled *Frequently Asked Questions* that includes a collection of questions and answers that were discussed at the meetings. In addition, Rover has conducted discussions throughout the Pre-Filing Review Process with owners of existing rights-of-ways, and pipeline companies to determine available alternatives to avoid construction impacts. Most significantly, this has resulted in Rover acquiring capacity on the Vector system from a point in Livingston County, Michigan to the Dawn Hub, thereby avoiding approximately 110 miles of pipeline construction impacts in Michigan, and approximately 14 miles in Ontario, Canada.

Rover continues to be engaged in consultation with FERC staff, Federal, state, and local government agencies, landowners, tribal officials, and other affected parties concerning the proposed construction activities associated with the Rover Pipeline. Based upon the Pre-Filing Review Process, Rover believes that the proposed pipeline route minimizes both landowner and environmental impacts. Rover has submitted copies of its draft Resource Reports to the pertinent government agencies, and has incorporated those agencies' comments into the final Resource Reports that constitute the Environmental Report included as Exhibit F-1 hereto. Rover will continue to work with affected landowners and agencies in an ongoing effort to address their concerns and minimize adverse impacts to the extent reasonably possible.

Rover will comply with the landowner notification requirements under Section 157.6(d) of the Commission's regulations.[49] A list of affected landowners is included with the Environmental Report as Privileged and Confidential information. Rover has contacted all affected landowners either by mail, phone and/or direct contact concerning the proposed Project. Rover has also notified all affected landowners of the recent route revision due to the acquisition of firm capacity on Vector. As part of that notification, Rover notified those stakeholders that they will no longer be affected by the Project, and will no longer remain on the mailing list maintained by Rover. A copy of the eliminated landowners list is provided in Resource Report 1.

In addition, Rover has developed and will implement a Landowner Complaint Resolution procedure that will provide landowners with clear and simple directions for identifying and resolving their environmental problems or concerns during construction activities, and during restoration of the right-of-way. Prior to construction, Rover will mail the Landowner Complaint Resolution procedure to each landowner whose property will be crossed by the Project.

XI.
ENVIRONMENTAL IMPACT AND COMPLIANCE

In light of the avoidance and minimization measures taken by Rover to route the Project, coupled with the utilization of existing capacity on third-party pipelines, there will be no significant adverse environmental effects resulting from the authorizations to construct, own, operate, and maintain new pipeline, compression, metering, and ancillary facilities as proposed herein. The Rover Pipeline has been designed, and will be constructed, in a manner that will avoid first, and then minimize environmental impacts. Rover has routed the proposed pipeline

[49] 18 C.F.R. § 157.6(d).

facilities into existing utility corridors, on existing right-of-ways, adjacent to existing roads or adjacent pipeline rights-of-way and in active agricultural fields whenever possible in order to avoid new, undisturbed lands, and in order to minimize impacts to landowners. An Environmental Report, submitted herewith as Exhibit F-1, provides a detailed analysis of the existing environmental, cultural, and socioeconomic conditions along the proposed route, and of the impact of the proposed facilities on the existing environment.

No significant adverse effects on surface water, wetlands, or groundwater resources are expected to occur from construction and operation of the Rover Pipeline. To minimize the impacts of erosion and sedimentation on surface waters, construction activities will be performed in compliance with the FERC's Upland Erosion Control, Revegetation and Maintenance Plan, and with Rover's Project-specific versions of FERC's Wetland and Waterbody Construction and Mitigation Procedures ("Rover Procedures"). Rover has attempted to avoid and/or minimize wetland crossings to the extent practicable during selection of the proposed route. Where jurisdictional wetlands cannot be avoided, crossings thereof will be done in accordance with Federal and state permits and approvals, and the Rover Procedures, including any deviations requested by Rover and approved by FERC.

Similarly, construction of the Rover Pipeline will not have any significant adverse impacts on fish, wildlife, or vegetation resources. No significant construction or operation impacts on Federal or state protected species are anticipated as a result of the Project. Where suitable habitat for these species is encountered by the Project, preventative measures will be employed to reduce the likelihood of impacts to the species. For example, various horizontal directional drill crossings are planned to minimize risks to sensitive resources such as wetlands and river crossings. Rover will continue to consult with the relevant agencies to identify whether

additional mitigation measures are required, and to develop appropriate measures to avoid or minimize potential impacts on endangered, threatened, or other species of concern, or their habitat, as necessary.

Rover has consulted with the State Historic Preservation Officers ("SHPOs") in West Virginia, Pennsylvania, Ohio, and Michigan, as well as the Federally-recognized Native American Tribes with potential ties to the Project area, as discussed in Resource Report 4. In addition, Rover has initiated Phase I Cultural Resource Surveys in the states mentioned above that will be filed with the SHPOs, as well as with the Commission. The Rover Pipeline will not have a significant adverse impact on any known archaeological or historic sites. Moreover, Rover will implement its Unanticipated Discoveries Plan in conjunction with development of the Project.

The Rover Pipeline will not have any significant adverse effects on geological resources. Any limited potential geological hazards resulting from the Project will be minimized by design measures. With respect to soils, Rover will adopt FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* as well as its Agricultural Mitigation Plan developed specifically in coordination with the state resource agricultural agencies or organizations, landowners and regional agronomists and soil scientists for the Project to ensure that potential effects on soils due to construction of the proposed Project are minimal. Permanent impacts on soils due to operation of the Rover Pipeline will be restricted to the areas where above-ground facilities are sited and the pipeline right-of-way, as discussed below.

The Project will not have significant adverse impacts on land use, recreation, or aesthetics. Where potential adverse effects are identified, mitigation measures are proposed to avoid or minimize those effects. With respect to air and noise emissions, construction and

operation of the Rover Pipeline is expected to have minimal permanent effects on air quality and noise levels. Rover has concluded from its environmental review that its Project construction will not individually or cumulatively have a significant effect on the quality of human health, the environment, or landowners.

Rover will comply with all mitigation requirements imposed by the environmental clearances from Federal, state, and local agencies for the Project. In this regard, Rover is seeking authorization by November 2015 for the Project in order that it may clear its rights-of-way prior to the summer months, and thus mitigate any potential impacts to Indiana and northern long-eared bats during the summer roosting season, consistent with requests by the U.S. Fish and Wildlife Service. To ensure that construction activities are conducted in compliance with all applicable requirements, including any conditions imposed by the Commission, Rover has agreed to fund a third-party environmental compliance monitoring program that will be directed by the Commission staff. The overall objectives of the compliance monitoring program are to: (1) assess environmental compliance during the construction process to achieve a high level of compliance throughout the process; (2) assist the Commission staff in screening and processing requests for any variances; and (3) create and maintain a database of daily reports documenting compliance. Final details regarding staffing and implementation of the compliance monitoring program will be developed in consultation with Commission staff prior to the commencement of construction and as part of Rover's Initial Implementation Plan documenting compliance with required mitigation measures.

XII.
CERTIFICATION

Pursuant to the Natural Gas Pipeline Safety Act of 1968,[50] Rover certifies that the facilities proposed herein will be designed, constructed, tested, operated, replaced, and maintained to conform with or exceed the requirements of Title 49, Part 192, of the Code of Federal Regulations, or any superseding Federal or state safety code applicable to natural gas transmission pipelines.[51] These regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures. 49 C.F.R. Part 192 specifies material selection and qualification, minimum design requirements, and protection from internal, external, and atmospheric corrosion. In addition, all construction and restoration activities will be performed in accordance with the environmental plans, procedures, and guidelines included in the Environmental Report under Exhibit F-1.

XIII.
WAIVER

Rover respectfully submits that this Application may be granted based upon this submission and without a trial-type evidentiary hearing. In accordance with Rules 801 and 802 of the Commission's Rules of Practice and Procedure,[52] Rover requests that the intermediate decision procedure be omitted, and waives oral hearing and opportunity for filing exceptions to the decision of the Commission.

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50 Pub. L. No. 90-481, 82 Stat. 720 (1968) (codified as amended at 49 U.S.C. §§ 60101–60140).

51 The United States Department of Transportation ("USDOT") has exclusive authority to promulgate safety and design standards for pipelines and transportation facilities under the Natural Gas Pipeline Safety Act. The USDOT pipeline standards are published in 49 C.F.R. Parts 190–199.

52 18 C.F.R. §§ 385.801, 385.802.

XIV.
DESCRIPTION OF EXHIBITS

This is an Application pursuant to Part 157 of the Commission's regulations.[53] The following exhibits are attached, incorporated by reference, or omitted for the reasons indicated. To the extent any required exhibits have been omitted, Rover requests that the Commission treat the omitted material as inapplicable or otherwise unnecessary to fully disclose the nature of the Project as proposed herein.

NOTICE — **NOTICE OF APPLICATION**

A form of notice suitable for publication in the *Federal Register* is submitted herewith, as noted herein in Section XVI.

EXHIBIT A — **ARTICLES OF INCORPORATION AND BYLAWS OR OTHER SIMILAR DOCUMENTS**

Submitted herewith are the State of Delaware Limited Liability Company Certificate of Formation and the Limited Liability Company Agreement of Rover Pipeline LLC.

EXHIBIT B — **STATE AUTHORIZATION**

Submitted herewith are the West Virginia, Pennsylvania, Ohio and Michigan state authorizations for Rover Pipeline LLC.

EXHIBIT C — **COMPANY OFFICIALS**

Submitted herewith.

EXHIBIT D — **SUBSIDIARIES AND AFFILIATIONS**

Submitted herewith.

EXHIBIT E — **OTHER PENDING APPLICATIONS AND FILINGS**

Addressed herein in Section XV—Related Applications.

EXHIBIT F — **LOCATION OF FACILITIES**

Submitted herewith.

EXHIBIT F-1 — **ENVIRONMENTAL REPORT**

Submitted herewith.

[53] *Id.* at Part 157.

EXHIBIT G **FLOW DIAGRAM SHOWING DAILY DESIGN CAPACITY, AND REFLECTING OPERATION WITH AND WITHOUT PROPOSED FACILITIES ADDED**

Rover's Exhibit G is designated as **Critical Energy Infrastructure Information ("CEII")** and is submitted in Volume III.

EXHIBIT G-I **FLOW DIAGRAMS REFLECTING MAXIMUM CAPABILITIES**

Omitted. Exhibit G reflects maximum capabilities.

EXHIBIT G-II **FLOW DIAGRAM DATA**

Rover's Exhibit G-II is designated as **Critical Energy Infrastructure Information (CEII)** and is submitted in Volume III.

EXHIBIT H **TOTAL GAS SUPPLY DATA**

Omitted. A discussion of Gas Supply Data is provided herein under Section V, Market Demand and Open Season.

EXHIBIT I **MARKET DATA**

Submitted herewith are: a List of Subscribed Volumes for the Rover Pipeline; and Precedent Agreements for the Rover Pipeline. The Precedent Agreements are designated as **Privileged Information** and are submitted in Volume IV.

EXHIBIT J **FEDERAL AUTHORIZATIONS**

Submitted herewith under Resource Report 1, Appendix 1A, Table 1A-9, Permits and Approvals includes Federal Authorizations.

EXHIBIT K **COST OF FACILITIES**

Submitted herewith.

EXHIBIT L **FINANCING**

Submitted herewith.

EXHIBIT M **CONSTRUCTION, OPERATION, AND MANAGEMENT**

Omitted. Rover and/or independent contractors will accomplish the proposed construction. The employees of Rover in the ordinary course of business will carry out operation and maintenance of the proposed facilities.

EXHIBIT N **REVENUES, EXPENSES AND INCOME**

Submitted herewith are Rover's schedules reflecting the estimated cost of service for the Rover Pipeline.

EXHIBIT O **DEPRECIATION AND DEPLETION**

Submitted herewith.

EXHIBIT P **TARIFF**

Submitted herewith are: Rover's *pro forma* Tariff and the derivation of the initial rates for firm, interruptible and parking service under Rate Schedules FTS, ITS and GPS, respectively. Rover's *pro forma* Tariff was prepared in conformance with the requirements of Part 154 of the Commission's regulations under the NGA,[54] and contains proposed rates, rate schedules, general terms and conditions, and forms of service agreements that comply with recent Commission orders and policy. Not less than 30 days and not more than 60 days prior to the commencement of service of the facilities proposed herein, Rover will file the attached *pro forma* tariff as Rover Pipeline LLC FERC NGA Gas Tariff Volume No. 1 for acceptance by the Commission.

EXHIBIT Z-1 **OTHER PROJECT MAPS**

Submitted herewith are the Rover Project Map – Other Pipelines; Panhandle System Map; and Trunkline Tariff Map.

EXHIBIT Z-2 **TRANSPORTATION PRECEDENT AGREEMENTS**

Submitted herewith are the Precedent Agreements for off-system transportation to the U.S./Canada International Boundary and to Trunkline Zone 1 A. The Precedent Agreements are designated as **Privileged Information** and submitted in Volume IV.

EXHIBIT Z-3 **ENVIROMENTAL MATRIX**

Submitted herein.

XV.
RELATED APPLICATIONS

In order to provide seamless transportation from the Rover interconnection with Panhandle in Defiance County, Ohio to Trunkline Gas' delivery points located from Dyer County, Tennessee to Panola County, Mississippi, both Panhandle and Trunkline Gas are filing applications concurrently with this Application pursuant to Section 7 of the NGA[55] for

[54] *Id.* at Part 154.

[55] 15 U.S.C. § 717f.

authorization to construct and operate piping and compression modifications to allow for natural gas to flow bi-directionally on their pipeline systems.

To the best of Rover's knowledge, there are no other applications or filings pending before the Commission, or required to be filed in conjunction with this Application beyond what is discussed herein.

XVI.
FEDERAL REGISTER NOTICE

Attached hereto is a notice, prepared in conformity with Sections 2.1 and 157.6(b)(7) of the Commission's regulations,[56] suitable for publication in the *Federal Register*.

XVII.
CONCLUSION

For the foregoing reasons, Rover respectfully requests that the Commission grant the instant Application for issuance of:

(1) a certificate of public convenience and necessity authorizing Rover to construct, own, and operate under Part 157, Subpart A of the Commission's regulations[57] a new interstate natural gas pipeline system with total system capacity of 3.25 Bcf/day, including: (a) approximately 711 miles of 24-inch, 30-inch, 36-inch and 42-inch diameter Supply Laterals and Mainlines extending from the Marcellus and Utica shale supply areas in West Virginia, Pennsylvania, and Ohio to a point of interconnection with the Vector Pipeline in Livingston County, Michigan; ten new compressor stations; nineteen metering and regulating facilities; and other ancillary facilities; (b) approval of the Tariff submitted herewith, which includes the authority to enter into negotiated rate agreements; and (c) approval of the initial recourse rates for service; and

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[56] 18 C.F.R. §§ 2.1, 157.6(b)(7) (2014).

[57] *Id.* at Part 157, Subpart A.

(2) blanket certificates authorizing Rover to: (a) engage in certain self-implementing routine activities pursuant to blanket certificate authority under Part 157, Subpart F of the Commission's regulations;[58] and (b) transport natural gas on an open-access and self-implementing basis under Part 284, Subpart G of the Commission's regulations.[59]

Rover also requests any waivers, including waiver of the Commission's shipper-must-have-title policy in order for Rover to acquire off-system capacity on third-party pipeline systems consistent with Commission policy, and other relief the Commission may deem necessary to grant the authorizations requested herein. Rover respectfully requests that these authorizations be granted by November 2015, so that the Rover Pipeline's Supply Laterals and Mainlines A and B may be completed and placed in service by December 2016.

Respectfully submitted,

/s/ Stephen T. Veatch

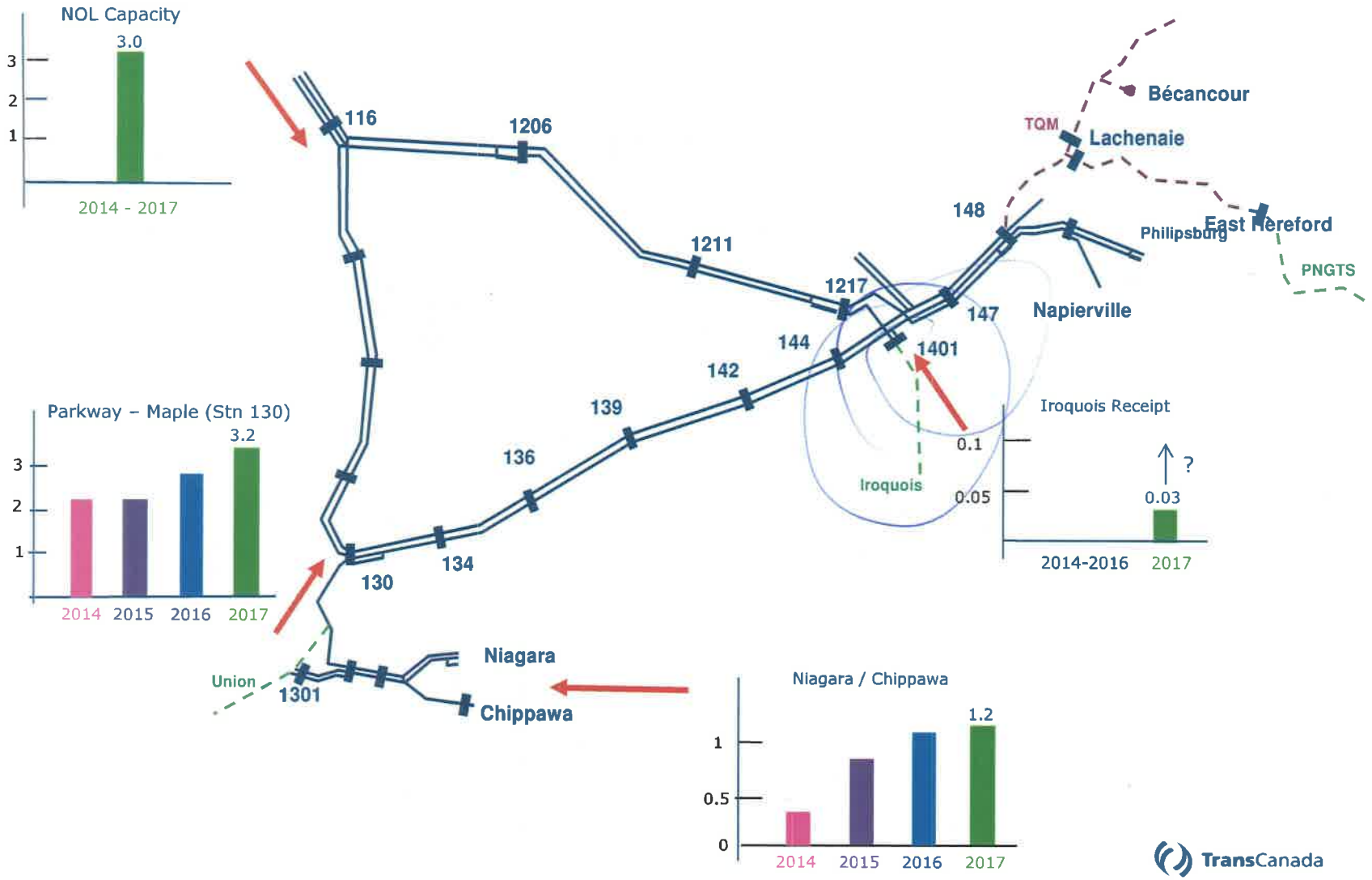
Stephen T. Veatch
Senior Director, Certificates
Rover Pipeline LLC

Dated: February 20, 2015

[58] *Id.* at Part 157, Subpart F.

[59] *Id.* at Part 284, Subpart G.

2014-2017 Capabilities (PJ/d)



ATTACHMENT 5

NEXUS SM
GAS TRANSMISSION

NEXUS GAS TRANSMISSION PROJECT

FERC SECTION 7(c) APPLICATION

VOLUME I

FERC Docket No. CP16-__-000

November 2015

NEXUS GAS TRANSMISSION, LLC
5400 Westheimer Court
Houston, TX 77056

NEXUS GAS TRANSMISSION

November 20, 2015

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: NEXUS Gas Transmission, LLC
Docket No. CP16-___-000
Abbreviated Application for Certificates of Public Convenience and Necessity and Related Authorizations

Dear Ms. Bose:

Pursuant to Section 7(c) of the Natural Gas Act, as amended, 15 U.S.C. § 717f(c), and Parts 157 and 284 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, 18 C.F.R. Parts 157 and 284, NEXUS Gas Transmission, LLC ("NEXUS") hereby files this application for the following certificates and related authorizations and waivers ("Application"):

1) a certificate of public convenience and necessity pursuant to Part 157, Subpart A of the Commission's regulations, authorizing NEXUS to construct, own, and operate a new natural gas pipeline system utilizing greenfield pipeline construction and capacity of third party pipelines to provide for the transportation of 1.5 million dekatherms per day ("Dth/d") of Appalachian Basin shale gas to consuming markets in northern Ohio and southeastern Michigan, and to the Dawn Hub in Ontario, Canada;

2) a certificate of public convenience and necessity authorizing NEXUS to acquire capacity (i) in Pennsylvania, West Virginia, and Ohio by lease with Texas Eastern Transmission, LP, (ii) in southeastern Michigan by lease with DTE Gas Company, and (iii) in southeastern Michigan by lease with Vector Pipeline, L.P.;

3) a blanket certificate pursuant to Part 157, Subpart F of the Commission's regulations, authorizing NEXUS to construct, operate, acquire, and abandon certain facilities as described in Part 157, Subpart F;

4) a blanket certificate pursuant to Part 284, Subpart G of the Commission's regulations authorizing NEXUS to provide open-access firm and interruptible interstate natural gas transportation services on a self-implementing basis with pregranted abandonment for such services;

5) approval of NEXUS' *Pro Forma* FERC NGA Gas Tariff; and

6) such other authorizations and waivers as may be necessary from the Commission to allow NEXUS to undertake the activities described in this Application.

NEXUS requests that the Commission issue an order granting the authorizations and waivers requested herein by November 1, 2016.

Included herewith are four volumes. Volume I contains public information and is comprised of the Application and its public exhibits, except the public version of Exhibit F-I (Environmental Report). Volume II-A contains the public version of Exhibit F-I. Volume II-B contains the public maps and drawings of Exhibit F-I. Volume III contains privileged and confidential information and is comprised of Exhibit F-I, Appendix 4B (Cultural Resources Information), Appendices 3A through 3G (contains sensitive species information), and Table 8.4-2 of Resource Report 8 (contains Potential Farm Service Agency Program Enrolled Lands Crossed by the NEXUS Project), and Exhibit Z-1 (the DTE Gas Lease and Vector Precedent Agreement), as well as the electronic versions of the hydraulic flow models supporting Exhibits G through G-II (NEXUS also requests privileged treatment as Critical Energy Infrastructure Information ("CEII") of these hydraulic flow models). Volume IV contains CEII and is comprised of Appendix 1A (certain aboveground facility site plans), Appendix 9A (certain drawings of the Air Permit Application), Appendix 9C (certain drawings of the Ambient Air Quality Analyses), and Exhibits G through G-II (Flow Diagrams and Flow Diagram Data).

The privileged information included in Volume III is marked "**CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE**".[1] Privileged information should be treated as confidential and is for use by Commission Staff only and not to be released to the public. The CEII information is included in Volume IV and marked "**CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION—DO NOT RELEASE**".[2] Information that is CEII should be treated as confidential pursuant to Order No. 630, *et seq*. and is for use by the Commission Staff only and not to be released to the public.[3] Questions pertaining to confidential information may be submitted to:

Steven E. Hellman
NEXUS Gas Transmission, LLC
5400 Westheimer Court
Houston, TX 77056
Email: sehellman@spectraenergy.com
Tel. 713-627-5215

[1] 18 C.F.R. §§ 380.12, 388.112 (2014).

[2] 18 C.F.R. §§ 388.112(b), 388.113 (2014).

[3] *Critical Energy Infrastructure Information*, Order No. 630, FERC Stats. & Regs. Regulations Preambles ¶ 31,140 (2003), 68 Fed. Reg. 9857 (Mar. 3, 2003), *order on reh'g*, Order No. 630-A, 104 FERC ¶ 61,106 (2003), 68 Fed. Reg. 46456 (Aug. 6, 2003).

Pursuant to the Commission's electronic filing guide,[4] NEXUS is eFiling this Application and will provide two complete copies to the OEP Room 62-46 and one complete copy to OGCEP Room 101-56.

In accordance with Rule 2011(c)(5) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2011(c)(5), I hereby state that I have read the paper copy version of the filing and am familiar with the contents thereof; that the paper copies contain the same information as the electronic documents; and that all of the statements contained therein are true and correct, to the best of my knowledge, information, and belief.

Should you have any questions concerning this request, please contact me at (713) 627-4488 or Leanne Sidorkewicz at (713) 627-4515.

NEXUS Gas Transmission, LLC
By: Spectra Energy NEXUS Management, LLC
in its capacity as operator

/s/ Berk Donaldson
Berk Donaldson
General Manager, Rates and Certificates

Attachments

cc: John Wood (Application Text only)
Terry Turpin (Application Text only)
Joanne Wachholder

[4] Federal Energy Regulatory Commission Filing Guide/Qualified Documents List (Apr. 22, 2014), *available at* http://www.ferc.gov/docs-filing/efiling/filing.pdf.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

NEXUS Gas Transmission, LLC) Docket No. CP16-___-000

ABBREVIATED APPLICATION FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND FOR RELATED AUTHORIZATIONS

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

NEXUS Gas Transmission, LLC) Docket Nos. CP16-___-000

ABBREVIATED APPLICATION OF NEXUS GAS TRANSMISSION, LLC FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND RELATED AUTHORIZATIONS

Pursuant to Section 7(c) of the Natural Gas Act ("NGA"), as amended, 15 U.S.C. § 717f(c), and Parts 157 and 284 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, 18 C.F.R. Parts 157 and 284, NEXUS Gas Transmission, LLC ("NEXUS") hereby files this application for the following certificates and related authorizations and waivers ("Application"):

1) a certificate of public convenience and necessity pursuant to Part 157, Subpart A of the Commission's regulations, authorizing NEXUS to construct, own, and operate a new natural gas pipeline system utilizing greenfield pipeline construction and capacity of third party pipelines to provide for the transportation of 1.5 million dekatherms per day ("Dth/d") of Appalachian Basin shale gas to consuming markets in northern Ohio and southeastern Michigan, and to the Dawn Hub in Ontario, Canada (the "NEXUS Project" or "Project");

2) a certificate of public convenience and necessity pursuant to Part 157, Subpart A of the Commission's regulations, authorizing NEXUS to acquire capacity (i) in Pennsylvania, West Virginia, and Ohio by lease with Texas Eastern Transmission, LP ("Texas Eastern"), (ii) in southeastern Michigan by lease with DTE Gas Company ("DTE Gas"), and (iii) in southeastern Michigan by lease with Vector Pipeline, L.P. ("Vector U.S.");

3) a blanket certificate pursuant to Part 157, Subpart F of the Commission's regulations, authorizing NEXUS to construct, operate, acquire, and abandon certain facilities as described in Part 157, Subpart F;

4) a blanket certificate pursuant to Part 284, Subpart G of the Commission's regulations authorizing NEXUS to provide open-access firm and interruptible interstate natural gas transportation services on a self-implementing basis with pregranted abandonment for such services;

5) approval of NEXUS' *Pro Forma* FERC NGA Gas Tariff (the "Tariff"); and

6) such other authorizations and waivers as may be necessary from the Commission to allow NEXUS to undertake the activities described in this Application.

NEXUS respectfully requests that the Commission issue these authorizations and waivers by November 1, 2016 so that NEXUS will be able to commence construction on a timely basis and place the Project into service by November 1, 2017, consistent with NEXUS' obligations to its Project shippers. In support hereof, and pursuant to the Commission's regulations, NEXUS respectfully submits the following:

I.
EXECUTIVE SUMMARY

The NEXUS Project is a new interstate pipeline system designed to transport 1.5 million Dth/d of Appalachian Basin shale gas, including Utica and Marcellus shale gas production, directly to consuming markets in northern Ohio and southeastern Michigan, and to the Dawn Hub in Ontario, Canada (the "Dawn Hub"). NEXUS has entered into definitive agreements with seven shippers, which together combine for a commitment of firm capacity of 835,000 Dth/d. The target in-service date for service on the Project facilities is November 1, 2017.

The United States ("U.S.") portion of the NEXUS Project will traverse Pennsylvania, West Virginia, Ohio, and Michigan, terminating at the U.S./Canada international boundary between Michigan and Ontario. The Canadian portion of the Project will extend from the U.S./Canada international boundary to the Dawn Hub. By combining greenfield pipeline construction with the use of capacity on other pipeline systems, NEXUS will be able to minimize environmental disruption, optimize project efficiencies, and serve more end-use markets.

The greenfield portion of the NEXUS Project will be constructed, owned, and operated by NEXUS and will extend from Utica East Ohio Midstream LLC's Kensington Processing Plant located in Hanover Township, Columbiana County, Ohio, to a new interconnection with the DTE Gas system west of Detroit in Ypsilanti Township, Washtenaw County, Michigan. The remainder of the NEXUS Project, which NEXUS will contract from third-party pipelines, will be comprised of the following: (1) expansion capacity on the Texas Eastern system in Pennsylvania, West Virginia, and Ohio; (2) existing and expansion capacity on the DTE Gas system in southeastern Michigan and extending to the U.S./Canada international boundary; and (3) existing capacity on the Vector U.S. system in southeastern Michigan and extending to the U.S./Canada international boundary. Outside of the U.S., NEXUS will contract for existing capacity on the Vector Pipeline Limited Partnership system to provide service from the U.S./Canada international boundary to the Dawn Hub.

The NEXUS Project is both a supply push and market pull pipeline project, meaning the Project targets transportation needs of both producers and end-use customers. The Project will provide critical access to emerging natural gas supplies from the Appalachian Basin, including the Marcellus and Utica shale gas producing areas, and will provide energy consumers in the region with affordable, cleaner-burning and domestically-abundant natural gas to help meet the

growing environmental need for cleaner power generation, commercial and industrial demand, and home heating in the region. This encourages greater competition in fuel markets and creates economic incentives for power generators currently burning coal or other fossil fuels to convert to natural gas. To the extent that the new clean-burning natural gas supply provided by the NEXUS Project is used to replace the burning of coal or other fossil fuels, it is expected that the NEXUS Project will result in an overall improvement in regional air quality.

To facilitate the Project and identify and address environmental and landowner concerns early in the certificate process, NEXUS participated in the Commission's National Environmental Policy Act ("NEPA") pre-filing process in Docket No. PF15-10-000. Prior to commencing the pre-filing process, NEXUS hosted a total of nine voluntary informational meetings for stakeholders in October and November of 2014. Seven of the meetings were in the vicinity of the proposed Project in Ohio and two were held in the vicinity of the proposed Project in Michigan. The voluntary informational meetings were set up similar to open house meetings, with subject matter experts available in the areas of surveying, construction, environmental impacts, regulatory affairs, state and federal relations, and right-of-way activities. Aerial imagery mapping identifying impacted tracts by landowner were available to allow for site specific discussion between the Project team and interested stakeholders. After the commencement of the pre-filing process, NEXUS held ten open houses along the pipeline route in Ohio and Michigan during February of 2015.

In April and May of 2015, the Commission Staff hosted six formal scoping meetings to garner input from the public and interested agencies on the Project. In light of the substantial work completed to date through the pre-filing process, including the feedback from open houses and scoping meetings, from the numerous scoping comments and other comments filed during

the pre-filing process and from Commission Staff regarding the Resource Reports found in Exhibit F-1 and the environmental analysis contained therein, many potential issues have been identified and addressed prior to the filing of this Application. The iterative and interactive process among NEXUS, the Commission Staff, and Project stakeholders resulted in various re-routes, consideration of various route alternatives and above-ground facility site locations, and reductions in the proposed environmental impacts and improvements in mitigation measures for the Project.

NEXUS is a new company and has not provided service in interstate commerce. Therefore, in this proceeding, NEXUS requests an open-access blanket certificate under Part 284, Subpart G of the Commission's regulations. The proposed terms and conditions pursuant to which NEXUS will provide these open-access services are set forth in the Tariff. In addition, NEXUS requests a blanket construction certificate under Part 157, Subpart F of the Commission's regulations.

As demonstrated herein, NEXUS satisfies the criteria for approval under the Commission's Certificate Policy Statement and granting NEXUS the foregoing certificates and authorizations is in the public convenience and necessity. NEXUS respectfully requests the authorizations proposed herein by November 1, 2016.

II.
IDENTITY OF APPLICANT AND COMMUNICATION

The exact legal name of the applicant is NEXUS Gas Transmission, LLC. NEXUS is a Delaware limited liability company organized and existing under the laws of the State of Delaware. NEXUS' principal place of business is 5400 Westheimer Court, Houston, Texas 77056. NEXUS is a joint venture owned by affiliates of Spectra Energy Partners, LP ("Spectra Energy" with an ownership interest of 50%) and DTE Energy Company ("DTE Energy" with an

ownership interest of 50%). NEXUS will be operated by Spectra Energy NEXUS Management, LLC, an indirect, wholly-owned subsidiary of Spectra Energy.

The names, titles, and mailing addresses of the persons to whom all correspondence and communications concerning this Application should be addressed are as follows:

Berk Donaldson*
Leanne Sidorkewicz
NEXUS Gas Transmission, LLC
5400 Westheimer Court
Houston, TX 77056
713-627-4488 (phone)
bdonaldson@spectraenergy.com
lsidorkewicz@spectraenergy.com

Mark K. Lewis
D. Kirk Morgan II*
Bracewell & Giuliani LLP
2000 K Street NW, Suite 500
Washington, DC 20006
202-828-5800 (phone)
mark.lewis@bgllp.com
kirk.morgan@bgllp.com

Steven E. Hellman*
NEXUS Gas Transmission, LLC
5400 Westheimer Court
Houston, TX 77056
713-627-5215 (phone)
sehellman@spectraenergy.com

*Persons designated to receive service pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure.

III.
PROJECT NEED

The NEXUS Project is designed to meet the growing demand for natural gas by the electric generation, distribution and end use markets in Ohio, Michigan, and Ontario. NEXUS held an open season for the Project from October 15, 2012 to November 30, 2012. A supplemental open season was held from July 23, 2014 to August 21, 2014, and a second supplemental open season was held from January 14, 2015, to February 12, 2015.[1] As a result of these open seasons, NEXUS has executed precedent agreements for 835,000 of NEXUS' total available capacity of 1.5 million Dth/d. The Commission views agreements for long-term firm

[1] The open season notices are provided in Exhibit Z-4 to this Application.

capacity as important evidence of market demand.[2] NEXUS continues to market the unsubscribed capacity that remains[3] and anticipates that the growing demand from the electric power sector in the Midwest for natural gas[4] and the need for incremental capacity out of the Appalachian Basin will result in additional demand for transportation capacity on the Project.

In addition to the agreements referenced above, NEXUS has had discussions with a number of potential shippers and end-users in Ohio and Michigan. As a result of these discussions, NEXUS has agreed to install the following market connections:

- Dominion East Ohio, Columbiana County, Ohio – tee-tap at approximate milepost ("MP") 2.3
- Dominion East Ohio, Wayne County, Ohio – tee-tap at approximate MP 52.4
- Brickyard Industrial Park; Urban Renewables II LLC, Medina County, Ohio – tee-tap at approximate MP 56.7
- Columbia Gas of Ohio, Inc., Medina County, Ohio – tee-tap at approximate MP 65.8
- Columbia Gas of Ohio, Inc., Medina County, Ohio – tee-tap at approximate MP 75.0
- NRG Power Midwest, LP, Lorain County, Ohio – tee-tap at approximate MP 88.0
- Board of Commissioners of Erie County, Ohio – tee-tap at approximate MP 120.3

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[2] The precedent agreements are included herewith in Exhibit I and include service terms ranging from 15 to 20 years. Agreements for long-term firm capacity are important evidence of market demand for a new project. *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, p. 61,744 (1999), *order clarifying Statement of Policy*, 90 FERC ¶ 61,128 (2000), *order further clarifying Statement of Policy*, 92 FERC ¶ 61,094 (2000) ("Certificate Policy Statement"). As reflected in Exhibit I, NEXUS has entered into precedent agreements with Union Gas Limited ("Union"), DTE Gas Company, DTE Electric Company, CNX Gas Company LLC, Noble Energy, Inc., and Chesapeake Energy Marketing, Inc. (together, the "Anchor Shippers"). In addition to the precedent agreements with these Anchor Shippers, NEXUS has also signed a precedent agreement with Enbridge Gas Distribution, Inc., who will take service as a Project shipper.

[3] In connection with these efforts, Columbia Gas of Ohio has signed a Memorandum of Understanding expressing an interest in taking up to 50,000 Dth/d of firm capacity on the Project. NEXUS is in discussions with other prospective customers as well.

[4] As discussed in Section XII of this Application, NEXUS' proposed Rate Schedule FT-1 allows for a firm hourly flow service to meet the unique service needs of this growing sector.

- Dominion East Ohio, Erie County, Ohio – proposed M&R Station at approximate MP 128.8
- Columbia Gas of Ohio, Inc., Sandusky County, Ohio – tee-tap at approximate MP 159.4
- The Waterville Gas & Oil Company, Lucas County, Ohio – tee-tap at approximate MP 182.1
- Ohio Gas Company, Fulton County, Ohio – tee-tap at approximate MP 199.3

The foregoing market connections represent approximately 1.4 million Dth/d of market interconnectivity for NEXUS. These third party tee-tap and interconnection entities are a combination of municipal entities, local distribution companies, electric generating facilities, and industrial end users whose facilities and/or properties are in the expected path of the NEXUS Project. The installation of the tee-taps identified above during the initial construction of the NEXUS Project will facilitate these various counterparties' access to gas supplies without interruption to transportation services provided to the existing shippers. In addition, NEXUS is in discussions for up to 630,000 Dth/d of additional interconnectivity.

NEXUS will offer firm and interruptible transportation services, including interruptible park and loan services, on a self-implementing, non-discriminatory, open access basis, consistent with Commission policies with service available at both recourse and negotiated rates. On the U.S. portion of the system, there will be the following three rate zones: the "Supply Zone", "Market Zone 1", and "Market Zone 2". The Supply Zone includes those facilities south of but not including the facilities located in Columbiana County, Ohio. Market Zone 1 includes those facilities immediately north of and including the facilities located in Columbiana County, Ohio to the facilities immediately south of and including the DTE Gas Milford Junction Station located in Milford Township, Oakland County, Michigan. Market Zone 2 includes those

facilities north and east of and including the Vector Milford Junction Station located in Milford Township, Oakland County, Michigan.

Firm transportation service will be offered under Rate Schedule FT-1 (including an hourly flow service) and limited firm transportation service under Rate Schedule LFT-1. Interruptible transportation service will be offered under Rate Schedule IT-1, interruptible park and loan service under Rate Schedule PAL, and interruptible aggregation and balancing services under Rate Schedule TABS. The rate schedules are set forth in the Tariff attached to this Application as Exhibit P.

IV.
DESCRIPTION OF FACILITIES

The NEXUS Project is comprised of the capacity to be made available through leases with Texas Eastern (the "Texas Eastern Lease"), DTE Gas (the "DTE Gas Lease"), Vector U.S. (the "Vector U.S. Lease"), and NEXUS' construction of the Mainline Facilities. The greenfield portion of the NEXUS Project involves the construction of the Mainline Facilities, including approximately 255 miles of new, 36-inch diameter natural gas transmission mainline pipeline in Ohio and Michigan. Approximately 45 percent of the proposed pipeline route is co-located with existing overhead electric transmission line, pipeline, or railroad utility corridors. An additional 42 percent of the route crosses agricultural land uses. As a result, 87 percent of the proposed pipeline route is sited to avoid conversion of existing land uses. This route has been refined during the pre-file process based on consultation with affected stakeholders, evaluation of impacts to the environment, constructability requirements, safety regulations, and requirements to meet customer needs. Details of the proposed facilities for the NEXUS Project are as follows:

- Greenfield Mainline Route – Originates at the Kensington Processing Plant in Hanover Township, Columbiana County, Ohio and extends through Ohio and Michigan to connect with DTE Gas in Ypsilanti Township, Washtenaw County, Michigan. The proposed mainline route includes:

- approximately 208 miles of new pipeline in Columbiana, Stark, Summit, Wayne, Medina, Lorain, Huron, Erie, Sandusky, Wood, Lucas, Henry, and Fulton Counties, Ohio; and

- approximately 47 miles of new pipeline in Lenawee, Monroe, Washtenaw, and Wayne Counties, Michigan.

- Compressor Stations

  - 52,000 horsepower ("hp") at Hanoverton Compressor Station in Columbiana County, Ohio;

  - 26,000 hp at Wadsworth Compressor Station in Medina County, Ohio;

  - 26,000 hp at Clyde Compressor Station in Sandusky County, Ohio; and

  - 26,000 hp at Waterville Compressor Station in Lucas County, Ohio.

- Interconnecting Pipeline to Tennessee Gas Pipeline ("TGP") – approximately 0.9 miles of new 36-inch diameter pipeline connecting the proposed metering and regulating ("M&R") station at the TGP mainline to the NEXUS mainline near the Kensington Processing Plant (Hanover Township).

- Leased Texas Eastern Capacity – capacity on the Texas Eastern system from certain receipt points located between Berne, Ohio and Uniontown, Pennsylvania to a delivery point at a new interconnection between Texas Eastern and the greenfield NEXUS facilities located in Hanover Township, Columbiana County, Ohio. The facilities associated with this capacity are part of the Texas Eastern Appalachian Lease Project ('TEAL Project"). The TEAL Project is expected to file its Certificate Application in the near future.

- Leased DTE Gas Capacity – capacity on the DTE Gas system from a new interconnection between NEXUS and DTE Gas in Ypsilanti Township, Washtenaw County, Michigan to (a) the Vector Milford Junction Station interconnect between DTE Gas and Vector U.S. in Milford Township, Oakland County, Michigan, (b) Belle River Mills interconnect between DTE Gas and Vector U.S. in St. Clair County, Michigan, and (c) the St. Clair interconnect between DTE Gas and Union at the U.S./Canada border. The DTE Gas Lease will utilize existing capacity on DTE Gas's system as well as expansion capacity created by additional compression at existing DTE Gas compressor stations. The construction of the associated DTE Gas expansion capacity will be subject to the jurisdiction of the Michigan Public Service Commission ("MPSC") as DTE Gas is a state-regulated gas utility providing limited interstate transportation service pursuant to 18 C.F.R. § 284.224.

- Leased Vector U.S. Capacity – capacity on the Vector U.S. system from the Vector Milford Junction Station located in Milford Township, Oakland County, Michigan and from the Belle River Mills station in St. Clair County, Michigan to the U.S./Canada

border.[5] Vector U.S. has advised NEXUS that it will perform the related facilities work under its blanket certificate (issued by FERC in Docket No. CP98-135-000 on May 27, 1999).

The Project will provide transportation services through facilities that are safe, efficient, and capable of being operated and maintained with effects on the environment that can be adequately mitigated.

V.
CERTIFICATE POLICY STATEMENT AND PUBLIC CONVENIENCE AND NECESSITY

The Commission established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest in the Certificate Policy Statement.[6] The Certificate Policy Statement explains that, in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances public benefits against any potential adverse consequences.[7] The Commission's stated goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of over-building, subsidization by existing shippers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.[8] Once the applicant demonstrates that the benefits to be achieved by a project will outweigh the potential effects and that the applicant has attempted to minimize any adverse effects, the Commission will find that the project is required by the public convenience and necessity.[9]

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[5] Outside of the U.S., NEXUS will subscribe for existing capacity on the Vector Pipeline Limited Partnership system to provide service in western Ontario from the U.S./Canada international border to the Dawn Hub.

[6] *See* Certificate Policy Statement.

[7] *Tennessee Gas Pipeline Co.*, 92 FERC ¶ 61,142, pp. 61,519-20 (2000).

[8] *Id.*

[9] Certificate Policy Statement, at p. 61,746.

As demonstrated herein and in the Resource Reports included herewith, the proposed facilities meet the criteria of the Certificate Policy Statement, and approval of the Project will serve the public interest and is required by the public convenience and necessity.

A. Threshold No-Subsidy Requirement.

Under the Certificate Policy Statement, the threshold requirement for existing pipelines that propose a new construction project is that the pipeline must be prepared to financially support the project without relying on subsidization from existing shippers.[10] NEXUS is a new pipeline company that has no existing shippers. As such, the threshold requirement of no subsidization is not applicable to NEXUS.[11]

B. No Adverse Effects on Existing Shippers, or on Existing Pipelines and Their Captive Shippers.

The Certificate Policy Statement requires an analysis to identify potentially adverse effects of the project on the existing shippers of the pipeline proposing the project, existing pipelines in the market and their captive shippers, or landowners and communities affected by the construction, and to determine whether the applicant has made efforts to eliminate or minimize those adverse effects.[12] If residual adverse effects on these groups are identified after efforts have been made to minimize them, the Commission will "evaluate the project by balancing the evidence of public benefits to be achieved against residual adverse effects."[13]

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[10] *Id.* at p. 61,746.

[11] *See, e.g., Ruby Pipeline, L.L.C.*, 128 FERC ¶ 61,224 at P 19 (2009) ("*Ruby*") (holding that, as a new interstate pipeline, Ruby satisfied the threshold requirement that the pipeline must be prepared to financially support the project without relying on subsidization from its existing shippers); *ETC Tiger Pipeline, LLC*, 131 FERC ¶ 61,010 at P 18 (2010) ("*ETC Tiger*") (finding that ETC Tiger, as a newly-formed entity, had no risk of subsidization by existing shippers); *Fayetteville Express Pipeline LLC*, 129 FERC ¶ 61,235 at P 18 (2009) ("*Fayetteville Express*") (concluding that, as a new natural gas pipeline with no existing shippers, Fayetteville Express' project met the threshold test that its existing shippers not subsidize the project).

[12] *Id.* at 61,745.

[13] *Id.*

The NEXUS Project will result in no impacts to existing shippers because NEXUS is a new pipeline company that has no existing shippers. The Project will have no adverse impact on existing pipelines or their shippers because it will not provide service that is already provided by another pipeline, nor is it designed to bypass an existing pipeline. Indeed, the Project will benefit Vector and DTE Gas, as well as their customers, by utilizing unsubscribed capacity on both of those systems. As discussed above, the NEXUS Project will provide new incremental capacity out of the Appalachian Basin and will directly serve consuming markets in northern Ohio and southeastern Michigan, and at the Dawn Hub.

C. Minimal Potential for Adverse Impacts to Landowners and Communities Affected by the Project.

By letter order dated January 9, 2015, the Commission granted NEXUS approval to utilize the Commission's NEPA pre-filing review process for the Project under Docket No. PF15-10-000. In that docket, NEXUS initiated an extensive public and stakeholder outreach program including open houses, community presentations, and the publication of information regarding the Project in newspapers of local distribution. Consistent with the Commission's desire for early involvement by potential stakeholders, NEXUS held nine stakeholder informational meetings beginning October and November of 2014, and ten open house meetings in February 2015, to solicit community feedback and work with landowners, government agencies, public officials, and other stakeholders to identify issues and respond to them in the early planning stages of the NEXUS Project.

NEXUS' informational meetings, open house meetings and FERC Staff's scoping meetings held in April and May of 2015 have led to discussions and actions to minimize impacts to landowners and communities. The results of these discussions are set forth in the responses to scoping comments and draft Resource Reports which NEXUS submitted in Docket No. PF15-

10-000. In light of the substantial work completed to date through the pre-filing process, including the feedback from open houses and scoping meetings and from the numerous scoping comments and approximately 1,000 public comments filed to the docket during the pre-filing process, many potential concerns have been identified and addressed prior to the filing of this Application. NEXUS will continue to work cooperatively with all affected landowners and stakeholders in an attempt to address their concerns and to minimize, to the extent practicable, adverse impacts.

A detailed listing of the agencies and other stakeholders with whom NEXUS has consulted is contained in Resource Report No. 1. A list of applicable permits and approvals, responsible agencies, and the filing status and schedule of each authorization is also contained in Resource Report No. 1. NEXUS submits that its choice of location for the Project facilities is environmentally preferable to other potential construction alternatives, and NEXUS worked diligently to achieve the most satisfactory location, to the extent practicable, for the affected stakeholders. NEXUS further submits that environmental benefits are derived from its proposed acquisition of pipeline capacity via leases with Texas Eastern, DTE Gas, and Vector U.S., by avoiding unnecessary duplication of facilities. The proposed facility locations strike a balance among landowner impacts, impacts to environmental resources, and Project requirements. An explanation of the environmental impacts associated with the Project and the measures that NEXUS intends to perform to mitigate such impacts is discussed more fully in the environmental impacts section of the Application and in the accompanying Resource Reports.

NEXUS certifies that the facilities proposed herein will be designed, constructed, installed, inspected, tested, operated, replaced, and maintained in accordance with the Natural Gas Pipeline Safety Act of 1968, as amended and recodified, 49 U.S.C. §§ 60101-60128, and

pursuant to the implementing regulations of the Department of Transportation, 49 C.F.R. Part 192, and any other applicable safety standards. NEXUS certifies that it will incorporate all applicable environmental information and NEPA compliance requirements into contract bid documents and, as needed, give appropriate instruction and training to contractors and inspectors in carrying out the Commission's guidelines. In addition to its adoption of all applicable environmental guidelines and its extensive pre-filing consultations, NEXUS will continue to be in contact with appropriate authorities regarding measures to mitigate any adverse environmental impacts along its route to the extent practicable.

D. Benefits Associated with the Project Outweigh the Adverse Effects.

When determining whether a proposed project is needed and will serve the public interest, the Commission balances the public benefits to be achieved by the project against the residual adverse effects of the proposed project. The NEXUS Project will provide a seamless path to transport Appalachian Basin shale gas, including Utica and Marcellus shale gas, directly to consuming markets in northern Ohio, southeastern Michigan, and the Dawn Hub. The region to be served by the NEXUS Project is in the midst of a sea change in natural gas supply and demand dynamics. On the supply side, it is anticipated that Marcellus and Utica shale gas production will average approximately 38 billion cubic feet per day ("Bcf/d") by 2025.[14] Additional pipeline capacity is needed to transport gas from this region to market. As one recent report explained, the enormous reserves and strong economics of Marcellus and Utica shale plays remain constrained by insufficient take-away pipeline capacity.[15] The NEXUS Project will provide much needed incremental capacity for producers in the Marcellus and Utica shale plays.

[14] ICF International Forecast: Natural Gas-Strategic Q3 Base Case ("ICF International Q3 2015 Forecast").

[15] IHS Energy – North American Natural Gas, October 30, 2015 as part of standard advisory service offering.

On the demand side, the NEXUS Project will serve a region that is experiencing significant pressure to invest in natural gas fired electric generation as a result of recent environmental policies.

According to a study conducted by the Analysis Group, the gas demand in Northern Ohio from residential, commercial, and industrial sectors could require an additional 12 billion cubic feet ("Bcf") per year of natural gas.[16] The increase is driven by home heating conversions from oil to gas, industrial growth, and greater usage in these sectors of the low-cost fuel. In addition, the study projects incremental gas demand from the electric power sector in Northern Ohio at approximately 0.5 Bcf/d. According to the study:

> Given both resource adequacy needs and the location of known retirements . . . most of the new natural gas-fired resources (i.e., approximately 3,050 MW) are located in Northern Ohio. These Northern Ohio plants are also the farthest along in their respective development and will be in-service before 2018.[17]

There are 16 coal-fired power plants in Ohio that have been announced for retirement with over 4,000 megawatts ("MW") of capacity that will need to be replaced.[18] Some of these generators may be converted to natural gas, which would increase further the demand for natural gas in the region. Plans are also underway to construct at least seven new natural gas-fired generation facilities in Ohio, totaling nearly 4,800 MW in incremental capacity.[19]

Similar to Ohio, Michigan is in the process of undergoing an energy infrastructure transition, driven by environmental policy, fleet modernization efforts, and the low price of

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[16] Analysis Group, Inc. 2015 Ohio Natural Gas Market Study; Prepared for NEXUS Gas Transmission Project at 22-23 (June 2015) ("Analysis Group Study").

[17] *Id.* at 36.

[18] SourceWatch.org website. http://www.sourcewatch.org/index.php/Coal_plant_retirements#Table_2:_Recent_and_upcoming_coal_plant_retirements_and_conversions.2C_including_probable_retirements. Accessed on August 29, 2013.

[19] Analysis Group Study at 36.

natural gas. In a November 2013 report, the MPSC described this transition as follows:

> Currently, the relatively low price of gas and the increase in shale production provides increased incentive to use gas for applications other than heating… Michigan, like the rest of the nation, is currently experiencing a compliance push to either upgrade, or retire and replace coal-fired electric power plants in order to comply with U.S. Environmental Protection Agency ("EPA") regulations. The EPA regulations coupled with the current, relatively low price of natural gas, may lead to the development of new natural gas-fired electric generating plants in Michigan . . . Natural gas-fired electric generating plants are considered to be economically and operationally viable.[20]

As demand for natural gas is projected to increase in Ohio and Michigan, the traditional flow of natural gas to the region from the Gulf Coast and Western Canada is declining. Production from the Gulf Coast has grown much more slowly in recent years while demand for natural gas in the Gulf Coast related to LNG exports, industrial load growth, and Mexican exports has increased.[21] The supply and demand dynamic in the Gulf Coast, coupled with rapid production growth from the Marcellus and Utica shale plays, has led to reversed pipeline flows towards the south.[22] At the same time, the amount of gas supply exported from Alberta since 2006 to these markets has declined, largely due to increased consumption in Western Canada. Between 2006 and 2014, natural gas exports from Alberta decreased by 4 Bcf/d and it is anticipated that exports will decline an additional ~1.5 Bcf/d through 2024.[23] Recent proposals to convert existing natural gas pipelines to crude oil pipelines, including the Energy Transfer Crude Oil Pipeline Project and TransCanada's Energy East Project, will further impact natural gas supply to the region.[24] Specifically, the impact of these conversion projects is that a

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[20] *Readying Michigan to Make Good Energy Decisions* (MPSC, 2013).

[21] ICF International Q4 (October) 2015 Forecast, Section 1, page 7.

[22] *See id.*

[23] ICF International Q3 2015 Forecast.

[24] *Trunkline Gas Co., LLC*, 145 FERC ¶ 61,108 (2013); *Energy East Pipeline Ltd., Application*, OF-Fac-Oil-E266-2014-02 (submitted Oct. 30, 2014).

combined 1.8 Bcf/d of natural gas pipeline capacity from the Gulf Coast and Western Canada will be unavailable to serve markets in northern Ohio, southeastern Michigan, and the Dawn Hub.

In sum, the NEXUS Project will provide much needed incremental capacity for production from the Utica and Marcellus shale gas areas and will deliver natural gas to a region that is uniquely positioned to benefit from the abundance of clean burning and affordable fuel. The NEXUS Project will also mitigate the reduction in supply from traditional Western Canadian sources and from the conversion of natural gas pipelines serving the region to oil service. For these reasons, the NEXUS Project is the pathway to restore the balance between natural gas supply and demand dynamics in the region. The services and benefits provided by the Project outweigh the Project's potential adverse effects.

E. The Project is Required by the Public Convenience and Necessity.

The NEXUS Project satisfies the criteria of the Certificate Policy Statement, and the construction and operation of the Project facilities as proposed herein are in the public interest and required by the public convenience and necessity. The Project will provide numerous benefits to the region it serves, including:

1) supplying abundant and affordable natural gas supplies to a region where traditional natural gas supply sources are declining;
2) supplying abundant and affordable natural gas supplies to a region where demand for such supplies is increasing;
3) creating economic incentives for power generators currently burning coal or oil to convert to natural gas; and
4) providing much needed incremental capacity for increased production out of the Appalachian Basin.

For the foregoing reasons, NEXUS respectfully submits that granting the authorizations requested herein is required by the public convenience and necessity.

In summary, the Project satisfies the Commission's Certificate Policy Statement, and is consistent with the Commission's economic, competition, and environmental goals. As described in detail in this Application and in accompanying exhibits, the Project benefits far outweigh the Project's potential adverse impacts, which have been or will be significantly mitigated through NEXUS' efforts, as described in this Application. Accordingly, the Project meets the standards of the Certificate Policy Statement, is in the public interest, and is required by the public convenience and necessity.

VI.
ENVIRONMENTAL IMPACT

The environmental impacts of the NEXUS Project are being reviewed by the Commission Staff as part of the environmental impact statement being prepared for Texas Eastern's planned TEAL Project.[25] The TEAL Project includes the construction of (1) approximately 4.4 miles of new 36-inch diameter pipeline loop located along Texas Eastern's existing pipeline in Market Zone 2, (2) a new 9,400 hp compressor unit at Texas Eastern's existing Colerain Compressor Station in Belmont County, Ohio, (3) a new 18,800 hp compressor station to be located in Columbiana County, Ohio, on Texas Eastern's 30-inch Line 73, and (4) various related auxiliary facilities and connecting pipeline. Accordingly, NEXUS is participating in the single NEPA review process for the TEAL Project and working with the Commission Staff and other applicable agencies to provide all of the potential environmental impacts and associated proposed mitigation measures for the proposed NEXUS Project.

[25] "Notice of Intent to Prepare an Environmental Impact Statement for the Planned NEXUS Gas Transmission Project and Texas Eastern Appalachian Lease Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings", Docket Nos. PF15-10-000 and PF15-11-000 (April 8, 2015).

NEXUS' Resource Reports included herewith as Exhibit F-I provide the information necessary for the Commission to complete an environmental analysis of the NEXUS Project, as required by NEPA, 42 U.S.C. §§ 4321-4370d. The Resource Reports were prepared pursuant to Part 380 of Commission's regulations, 18 C.F.R. § 380.12, and developed through participation by NEXUS in the Commission's pre-filing process in Docket No. PF15-10-000. In the pre-filing proceeding, the Commission's Staff had an opportunity to begin the process of conducting its environmental analysis of the NEXUS Project. As discussed herein, multiple other interested parties have had an opportunity to submit comments on the Project to FERC and to review the public filings of the draft Resource Reports. These comments, to the greatest extent practicable, have been incorporated into the Project design and siting, and thereafter into the final Resource Reports.

As the Resource Reports show, the environmental impacts associated with the construction of the NEXUS Project can be adequately mitigated. NEXUS has incorporated the Commission's *Upland Erosion Control, Revegetation and Maintenance Plan* and *Wetland and Waterbody Construction and Mitigation Procedures* (May 2013 versions of both) into the Erosion and Sedimentation Control Plan to be used in this proposal. In addition, NEXUS will incorporate standard environmental mitigation measures into its construction specifications.

The Resource Reports demonstrate that (i) any adverse impacts associated with the NEXUS Project can be adequately mitigated or avoided, (ii) the proposed action is the best alternative, (iii) short-term use of the environment will not conflict with long-term productivity, and (iv) significant resources will not be irreversibly or irretrievably lost due to construction activities. Under these circumstances, approval of the proposed facilities described herein will not be a major federal action significantly affecting the quality of the human environment.

The NEXUS Project will be constructed in accordance with applicable environmental permits, approvals, and regulations. NEXUS is committed to minimizing the environmental impact of the Project and to reclaiming all disturbed areas to a consistently high standard, regardless of ownership. The construction activities are not anticipated to have any significant adverse effects on residents or industrial areas and the impacts to public, recreational, or scenic areas, as well as vegetation, wildlife, and cultural resources will be limited. NEXUS will employ Environmental Inspectors during construction to ensure that all operations are in compliance with applicable federal and state environmental permits and regulations. The presence of an on-site Environmental Inspector will assist in assuring that all construction is undertaken in accordance with the conditions included in the Commission's certificate order.

In accordance with permit requirements, NEXUS has evaluated ambient and Project noise levels associated with the Project facilities, assessed impacts, and proposed mitigation measures that can be implemented, if necessary, to ensure that noise levels comply with applicable FERC and state noise standards. Construction and operation emissions associated with the new compressor stations will comply with all applicable air quality permits. In this regard, air quality impacts from operation of the proposed compressor stations will be minimized by the use of equipment, emissions controls, and operating practices.

VII.
LANDOWNER NOTIFICATION AND OUTREACH

NEXUS will comply with the landowner notification requirements set forth in Section 157.6(d) of the Commission's regulations. NEXUS will notify all owners of properties that are directly affected by the proposed construction activities, abutting the proposed construction areas, any landowners with residences within 50 feet of the proposed construction

areas, landowners with property within 1/2 mile of proposed compressor stations, and any other landowners that may be directly affected by the proposed construction activities.[26]

Pursuant to the Project's Public and Agency Participation Plan, representatives of NEXUS began meeting with governmental stakeholders in August 2014, in advance of landowner notifications, and well in advance of the submission of the Pre-Filing Letter. Recognizing that the Project's stakeholder outreach program will need to continue beyond the conclusion of the Project's construction activities, some key components include:

- notification and ongoing communication with state, municipal, and county officials and state legislative and congressional delegation members in advance of or contemporaneous with notification of affected landowners in order to ensure that interested stakeholders have timely access to NEXUS Project information;
- coordination and consultation among agencies to facilitate information exchange and regulatory guidance;
- participation in multiple informational meetings with affected stakeholders both prior to and during the pre-filing process;
- participation in FERC scoping meetings and development of comprehensive responses to stakeholder comments; and
- significant ongoing communication and collaboration with affected stakeholders in order to incorporate appropriate modifications for the proposed route and to finalize facility designs.

[26] Pursuant to the Commissions' regulations, NEXUS will file an updated list of affected landowners with the Commission within 30 days of the filing of the Application. 18 C.F.R. § 157.6(d)(5).

1. Single Point of Contact to Ensure Consistent Message

Since August 2014, NEXUS has had in place a dedicated toll-free telephone number, (844) 589-3655, for the Project, which since September of 2014 has been staffed by a NEXUS representative. The toll-free number has a dedicated answering machine for calls received after hours. The toll-free number has been listed in communications made by NEXUS to landowners to facilitate their ability to obtain additional information in a timely manner, which has resulted in more than 600 calls received on the toll-free number. In addition, NEXUS designated a spokesperson and primary contact for fielding inquiries posed by the media and other interested stakeholders.

2. Comprehensive Stakeholder Outreach

Since August 2014, NEXUS has had more than 550 communications, including meetings, presentations, and telephone conversations with government officials, agencies, and non-governmental organizations. Additionally, from August 2014 through October 2015, NEXUS has sent project mailers to approximately 47,000 stakeholders in communities along or near the proposed route in order to provide Project related information. NEXUS also sent notifications to affected landowners notifying them of the pre-filing process, stakeholder meetings, and open houses, as well as where NEXUS Project information can be found, and encouraging their participation. All these efforts that were designed to inform, communicate, and listen to feedback have resulted in numerous modifications to the NEXUS proposed route. Through an inclusive consultation process with affected stakeholders, NEXUS has developed a technically feasible pipeline route that meets the balance between the number of landowners affected, impact to the environment, constructability requirements, and safety regulations, while also meeting customer needs and creating economic development opportunities for communities. NEXUS

will continue these communications and outreach efforts throughout the Application review process.

a. State, Local, and Congressional Officials

Prior to notifying affected landowners along the pipeline route, the NEXUS government relations team contacted state, county, municipal, and other local officials, state legislators, and congressional delegation members and/or their staffs to apprise them of the NEXUS Project. In conjunction with those contacts, NEXUS prepared preliminary maps and fact sheets outlining the purpose of the NEXUS Project and the proposed facilities. NEXUS representatives solicited input from interested stakeholders and utilized that feedback as the facility design process evolved.

In order to enable local, state, and federal government officials and elected representatives to be a touchstone for their constituents and serve as advocates for their concerns, NEXUS notified various officials prior to making written notification to affected landowners. The briefings of the aforementioned officials and staffs allowed them to be informed in anticipation of possible phone calls or emails from constituents. State, local, and Congressional officials were invited to affected stakeholder informational meetings in October and November of 2014, open house meetings in February of 2015, and FERC's scoping meetings in April and May of 2015.

b. State and Federal Regulatory Agencies

The NEXUS Project team has reached out to federal and state regulatory agencies from the outset of NEXUS Project development. Just as input from landowners and public officials has been utilized to inform facility design, the feedback received from regulatory agencies has also been used in a similar fashion. As with other outreach activities, NEXUS' overarching goal is to submit a comprehensive certificate application that adequately supports the need for the

NEXUS Project, demonstrates mitigation of the Project's impacts and is responsive to affected stakeholder input received.

c. Affected Landowner Outreach

Shortly after the sessions with public officials, NEXUS mailed letters to affected landowners along the Project's 600-foot wide proposed study corridor to describe the NEXUS Project and to provide information about their rights as landowners consistent with the Commission's landowner outreach process. Each letter contained a description of the NEXUS Project and an indication that the recipient's property might be directly affected by the NEXUS Project. Maps of the anticipated areas of impact were also included. In addition, each letter contained the NEXUS Project's toll-free telephone number and a general description of what landowners should expect from NEXUS, in terms of future survey requests and survey activities. Another letter was subsequently mailed to landowners formally requesting survey permission for the right-of-way for the proposed pipeline and related facilities. Further communication with affected landowners continues as the proposed route is finalized.

d. Stakeholder Communications: Mailings and Websites

In order to provide current information on the NEXUS Project and facilitate involvement by stakeholders, communications by mailings have been provided to affected landowners as well as to public officials and other interested parties. Additionally, a targeted project page on the Spectra Energy website was launched in August 2012 and a stand-alone NEXUS Project website (www.nexusgastransmission.com) was published in January 2015, which includes the toll-free telephone contact number. Generally, the website contains a Project description, information on the Commission's processes, NEXUS' FERC filings in Docket No. PF15-10-000, NEXUS Project timetables, public meeting notices including locations and answers to frequently asked questions. The website also contains hyperlinks to the Commission's e-Library and to the PDF

version of the Commission's informational brochure entitled, "An Interstate Natural Gas Facility on My Land? What Do I Need to Know?", as well as facts about the Project, natural gas, pipeline operations, and pipeline safety and maintenance. Additionally, the website includes an interactive proposed route map, a FAQ section, and the toll-free telephone number to reach NEXUS representatives. The toll-free number and the website address have been and will continue to be referenced in stakeholder communications.

Stakeholder informational meetings about the NEXUS Project were held in October 2014 and November of 2014 and open house meetings were held in February of 2015. As the NEXUS Project advanced, notices of the open houses and opportunities for public comment were posted on the NEXUS Project's website as well as other timely informational resources such as monthly progress reports. In addition, notice of the Commission's scoping meetings and NEXUS' comprehensive responses were posted.

e. Informational Meetings and Open Houses

As discussed herein above, in an effort to provide timely NEXUS Project information to landowners, public officials and the general public, the NEXUS Project team conducted voluntary stakeholder informational meetings and open houses. Public officials and affected landowners were invited to attend both the informational meetings and open houses. Additionally, the open houses were advertised in local newspapers, inviting the general public to attend. At each of the meetings, representatives from multiple disciplines within the Project team (e.g., right-of-way, environmental, engineering, construction, regulatory, stakeholder outreach, and government relations) were on-hand to answer questions. These informational and open house meetings were designed to be interactive and proved invaluable for the NEXUS Project team because they were able to hear firsthand from interested stakeholders and respond to important questions about the right-of-way, easements, land records, pipeline safety,

construction activities, and other areas of interest about the Project. The following is a description of the format and the type of information provided at these meetings:

i. overview of the NEXUS Project, aerial and topographical maps, and information stations staffed by team members from various disciplines;

ii. sign-up sheets and follow-up sheets related to individual landowner inquiries;

iii. handouts containing NEXUS Project overviews, pipeline safety, construction activities, right-of-way easement agreement process, timelines, tables of required permits, and NEXUS Project team contact information; and

iv. copies of "*An Interstate Natural Gas Facility on My Land? What Do I Need to Know?*", information about pipeline safety and environmental mitigation measures, and smaller-scale NEXUS Project corridor maps.

f. FERC Site Visits and Scoping Meetings

The Commission conducted six scoping meetings during April and May of 2015 in Ohio and Michigan. NEXUS team members were on hand an hour before the scoping meetings commenced to provide information to stakeholders. NEXUS filed comprehensive responses to questions raised during the scoping period and posted those responses on the NEXUS Project website.

VIII.
SUPPLY

NEXUS proposes only to provide open-access transportation service on the NEXUS Project and, accordingly, NEXUS' shippers are responsible for obtaining supplies to be transported on the capacity created by the Project.

IX.
LEASES

As the Commission has concluded previously with respect to similar pipeline-to-pipeline lease arrangements, NEXUS' proposed acquisition of pipeline capacity via the Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease will provide benefits to shippers on the NEXUS system and to the environment by avoiding unnecessary duplication of facilities.[27] The Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease will allow NEXUS to provide its shippers with seamless transportation across four pipeline systems and thereby avoid the administrative burdens of dealing with multiple pipelines. The Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease will also allow NEXUS to streamline the construction necessary to provide the service reliability and supply optionality desired by the market, thereby reducing the cost and the potential environmental impact of the NEXUS Project.[28]

NEXUS respectfully requests in this Application that the Commission grant NEXUS the certificate authorization necessary to acquire capacity via the Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease. In the near future, (i) Texas Eastern and Vector U.S. will be separately requesting the abandonment authorization necessary to lease capacity on their jurisdictional interstate pipeline systems to NEXUS[29] and (ii) DTE Gas will be requesting a

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[27] *Gulf South Pipeline Co.*, 146 FERC ¶ 61,149 at P 21 (2014) ("The Commission has found that capacity leases in general have several potential public benefits. Leases can promote efficient use of existing facilities, avoid construction of duplicative facilities, reduce the risk of overbuilding, reduce costs, and minimize environmental impacts. In addition, leases can result in administrative efficiencies for shippers."); *Islander East Pipeline Co.*, 97 FERC ¶ 61,363 at P 70 (2001) (describing benefit of leasing capacity was "to reduce duplicative and unnecessary facilities, which is consistent with the Commission's goal of meeting new demand with both less cost and less environmental impact"); *Vector Pipeline L.P.*, 85 FERC ¶ 61,083 at 61,298 (1998).

[28] Attached hereto as Exhibit Z-1 is the Texas Eastern Lease, the DTE Gas Lease, and a precedent agreement between NEXUS and Vector U.S. that sets forth the key commercial terms of the Vector U.S. Lease (the "Vector Precedent Agreement"). NEXUS anticipates that the Vector U.S. Lease will be finalized and executed in the near future, at which time NEXUS will supplement this application with a copy of the lease.

[29] Texas Eastern has requested this abandonment authority in the same proceeding in which it has requested the certificate authorization necessary to construct the TEAL Project.

limited jurisdiction certificate authorizing it to lease capacity on its non-jurisdictional intrastate pipeline system to NEXUS.

A. Description of the Leases

1. Texas Eastern Lease

Texas Eastern has agreed to construct the TEAL Project and to transfer the capacity created by the project via lease to NEXUS, and NEXUS has agreed to lease the expansion capacity from Texas Eastern. The capacity proposed to be leased extends from receipt points located between Berne, Ohio and Uniontown, Pennsylvania to a delivery point in Hanover Township, Ohio, at a new interconnection between Texas Eastern and the southern-most point on the greenfield portion of the NEXUS Project.

The daily quantity of firm pipeline capacity associated with the Texas Eastern Lease, exclusive of any fuel gas, from the receipt points to the delivery point is 637,559 Dth/d effective November 1, 2017 (or the date on which the conditions precedent are satisfied) increasing to 950,155 Dth/d effective November 1, 2018 (or such later date as provided in the Texas Eastern Lease, depending on the satisfaction of certain conditions precedent), in each case subject to and depending on the exercise of certain NEXUS rights to decrease its contracted capacity as provided in the Texas Eastern Lease. The Texas Eastern Lease capacity will be subject to the point-to-point capacity path and limited rights to receipt and delivery points listed in Exhibit A of the Lease. The Texas Eastern Lease will remain in force and effect for a primary term of 15 years beginning from the Lease Commencement Date, and it may be extended six times in up to 5-year increments.

2. DTE Gas Lease

DTE Gas has agreed to transfer existing capacity as well as expansion capacity via lease to NEXUS, and NEXUS has agreed to lease that capacity from DTE Gas. The capacity proposed to be leased extends from a new interconnection between NEXUS and DTE Gas in Ypsilanti Township, Washtenaw County, Michigan to (a) the Vector Milford Junction Station interconnect between DTE Gas and Vector U.S. in Milford Township, Oakland County, Michigan, (b) Belle River Mills interconnect between DTE Gas and Vector U.S. in St. Clair County, Michigan, and (c) the St. Clair interconnect between DTE Gas and Union at the U.S./Canada border.

The daily quantity of firm pipeline capacity associated with the DTE Gas Lease, exclusive of any fuel gas, from the receipt points to the delivery points is a total of 1,351,829 Dth/d, subject to and depending on the exercise of certain NEXUS rights to increase or reduce its contracted capacity as provided in the DTE Gas Lease. The DTE Gas Lease capacity will be subject to the point-to-point capacity path and limited rights to receipt and delivery points listed in Exhibit A to the DTE Gas Lease. The DTE Gas Lease will remain in force and effect for a primary term of 15 years beginning from the lease commencement date set forth in the DTE Gas Lease and may be extended six times in up to 5-year increments.

3. Vector U.S. Lease

Vector U.S. has agreed to make minor modifications to its existing facilities and NEXUS has agreed to lease existing capacity from Vector. The capacity proposed to be leased extends from the Vector Milford Junction Station located in Milford Township, Oakland County, Michigan and from the Belle River Mills station in St. Clair County, Michigan to the U.S./Canada border. The daily quantity of firm pipeline capacity associated with the Vector U.S. Lease, exclusive of any fuel gas, is 130,000 Dth/d from the Milford Meter receipt point and 325,000 Dth/d from Belle River, to the U.S./Canada Border. The Vector U.S. Lease capacity

will be subject to the point-to-point capacity path and limited rights to receipt and delivery points listed in Exhibit A in the Lease. The Vector U.S. Lease will remain in force and effect for a primary term of 15 years beginning from the lease commencement date and may be extended six times in up to 5-year increments.

B. Granting Authorization for NEXUS to Obtain the Lease Capacity from Texas Eastern, DTE Gas, and Vector U.S. is in the Public Convenience and Necessity.

The Commission, on several occasions, has recognized the benefits of leasing pipeline capacity in the context of new pipeline development.[30] In a declaratory order involving Texas Eastern Transmission ("Declaratory Order"),[31] the Commission determined that permitting a pipeline to hold lease capacity on another pipeline system would promote flexibility in a dynamic and rapidly changing market.[32] Consequently, the Commission announced that it would allow pipelines to acquire lease capacity on a case-by-case basis.[33] The Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease provide all the potential benefits from pipeline capacity leasing recognized by the Commission in the Declaratory Order.

FERC uses a three-part analysis to determine whether to approve a lease. Specifically, FERC will approve a lease if it finds that "(1) there are benefits from using a lease arrangement;

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[30] *See, e.g., Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089 (2008) ("*Midcontinent*"); *Texas Eastern Transmission Corp.*, 87 FERC ¶ 61,325 (1999); *Midwestern Gas Transmission Co.*, 73 FERC ¶ 61,320 (1995).

[31] *Texas Eastern Transmission Corp.*, 74 FERC ¶ 61,074 (1996).

[32] The Commission stated that its actions in the Texas Eastern proceeding further several Commission goals, including: (i) enhancing competition by providing pipelines with the flexibility to meet changing market demands post-Order No. 636; (ii) allowing for transparent capacity transactions; (iii) improving market monitoring by market participants and the Commission; (iv) meeting new demand with both the least cost and least environmental impact; and (v) providing shippers with access to new supply and market areas and/or allowing shippers to avoid administrative burdens from dealing with multiple pipelines. *Texas Eastern Transmission Corp.*, 78 FERC ¶ 61,277, p. 61,162 (1997); *see also Texas Eastern Transmission Corp.*, 93 FERC ¶ 61,273 (2000), *order denying reh'g*, 94 FERC ¶ 61,139, p. 61,531 (2001).

[33] The Commission, on prior occasions, has authorized the construction of facilities to create additional capacity for lease to another pipeline. *See, e.g., Texas Eastern Transmission Corp.*, 87 FERC ¶ 61,325; *Texas Eastern Transmission Corp.*, 71 FERC ¶ 61,244 (1995); *Trunkline Gas Co.*, 64 FERC ¶ 61,142 (1993).

(2) the lease payments are less than, or equal to, the lessor's firm transportation rates for comparable service over the term of the lease; and (3) the lease arrangement does not adversely affect existing customers."[34] The Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease will satisfy these requirements and should therefore be approved.

First, the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease will each provide substantial benefits to the public. They will eliminate the environmental impacts associated with the construction by NEXUS of duplicative and unnecessary facilities that NEXUS would otherwise have to construct but for its ability to lease capacity from Texas Eastern, DTE Gas, and Vector U.S.[35] Moreover, the DTE Gas Lease and Vector U.S. Lease promote the efficient use of existing pipeline facilities by utilizing existing capacity. Furthermore, NEXUS is acquiring capacity at a cost that is lower than the cost that would be associated with the construction of greenfield facilities that would duplicate the transportation paths set forth in the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease, benefiting NEXUS' shippers.[36] The Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease will also allow NEXUS to provide its shippers with seamless access, under a single firm transportation contract, from production areas (including Utica and Marcellus shale gas production) to multiple markets as explained herein. In addition, the Texas Eastern Lease provides NEXUS' shippers with access to new supply sources, as described in detail within this Application.

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[34] *Midcontinent* at P 31.

[35] *See, e.g., Midcontinent* at P 35; *Dauphin Island Gathering Partners*, 87 FERC ¶ 61,078, p. 61,342 (1999).

[36] *CNG Transmission Corp.*, 80 FERC ¶ 61,092, p. 61,322 (1997).

Second, lease payments under the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease will be less than firm transportation rates for comparable service on each of the respective pipeline systems. Therefore, the second part of FERC's analysis is also met.

Third, the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease will not adversely affect existing shippers. As explained herein, NEXUS is a new pipeline so has no existing shippers. The DTE Gas Lease and Vector U.S. Lease will not adversely affect DTE Gas or Vector U.S. shippers because the leases utilize currently unsubscribed capacity or incremental capacity to be installed through facility expansion. The Texas Eastern Lease also does not adversely impact existing Texas Eastern shippers for the reasons explained in the TEAL Project application.

For the foregoing reasons, NEXUS respectfully requests that the Commission grant NEXUS the certificate authorization necessary to acquire capacity for the Project via the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease.

X.
RATES

A. Recourse and Negotiated Rates

All of the shippers have elected to pay negotiated rates. NEXUS will file tariff records reflecting its negotiated rate agreements with its shippers within 30 to 60 days prior to when the underlying negotiated rates are proposed to become effective. Under the Commission's Alternative Rate Policy Statement, if a pipeline enters into negotiated rate agreements, the pipeline must provide recourse rates as an alternative.[37] This filing includes recourse rates as set forth in the Statement of Rates contained in Part 4 of the proposed Tariff. Proposed initial

[37] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines,* 74 FERC ¶61,076 (1996), *reh'g and clarification denied*, 75 FERC ¶ 61,066 (1996).

maximum and minimum recourse reservation and commodity rates for three separate rate zones – the Supply Zone, Market Zone 1, and Market Zone 2 – are set out for Rate Schedules FT-1, LFT-1, IT-1, and PAL. NEXUS has allocated $5 million of costs to interruptible services under Rate Schedules IT-1, and PAL. The calculation of NEXUS' initial rates for service is detailed in Exhibit P and is described in this Article X, Section B, below.

In addition to the rates for the firm and interruptible services provided, applicable charges and surcharges include in-kind fuel retainage, referred to as the Applicable Shrinkage Adjustment percentage ("ASA Percentage"). The initial ASA Percentage will include the NEXUS facilities fuel plus NEXUS' fuel gas responsibility pursuant to the Texas Eastern Lease, DTE Lease, and Vector U.S. Lease. The ASA Percentage to be retained will be based upon the following fuel areas: (1) the "Supply Fuel Area", which includes those facilities south of but not including the facilities located in Columbiana County, Ohio; (2) the "Market Fuel Area 1a", which includes those facilities immediately north of and including the facilities located in Columbiana County, Ohio, to the facilities immediately south of and including the facilities located at Ypsilanti Township, Washtenaw County, Michigan; (3) the "Market Fuel Area 1b", which includes those facilities immediately north of but not including the facilities located at Ypsilanti Township, Washtenaw County, Michigan, to the facilities immediately south of and including the DTE Milford Junction Station located in Milford Township, Oakland County, Michigan; and (4) the "Market Fuel Area 2", which includes those facilities north of and including the Vector Milford Junction Station located in Milford Township, Oakland County, Michigan.[38] The calculation of the ASA Percentage for Market Fuel Area 1a is set forth in

[38] The Commission's basic principle of ratemaking is that rates must reasonably reflect material variation in costs of service due to distance over which service is provided. *See* 18 C.F.R. § 284.10(c). The Commission's Rate Design Policy Statement explains that mileage-based methods of ratemaking, including zoned rates, will be evaluated on a

Exhibit Z-3, as well as the fuel applicable to the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease. Article XII(C) below contains an explanation of how NEXUS will annually update these periodic rate adjustment components.

B. Cost of Service and Rate Design

NEXUS' cost of service is set forth in Exhibit K to this Application. NEXUS then calculates its proposed recourse rates for each zone based on this cost of service and on billing determinants that reflect the total mainline design capacity. Schedules 2 - 4 of Exhibit P show NEXUS' proposed initial recourse rate derivation for 2017 and 2018 service, including the total cost of service and rate design volumes. NEXUS proposes to phase its rates for 2017 and 2018 service because of the phase-in of leased capacity under the Texas Eastern Lease.

As described in Exhibit P, Schedule 1, the rate derivation for the initial recourse rates includes a depreciation rate of 1.67% for transmission facilities, a 35% federal income tax rate, and a 1.62% composite state income tax rate. The annual lease expense charges reflected in Exhibit P are pursuant to the Texas Eastern Lease, DTE Gas Lease, and Vector U.S. Lease described herein above in Article IX. The rate derivation includes a proposed overall rate of return of 10.70% based on NEXUS' expected 40% debt, 60% equity capital structure with a debt cost of 5.75% and a return on equity ("ROE") of 14.0%.

The expected capital structure for NEXUS is reflective of the large capital expenditure necessary to construct the Mainline Facilities, which, in turn, will result in a large non-recourse placement of debt in the debt markets. NEXUS' weighted average cost of capital under its proposed capital structure is 10.70%, which is consistent with the range that the Commission has

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case-by-case basis to determine whether a zone design is appropriate. *Interstate Natural Gas Pipeline Rate Design*, 48 FERC ¶ 61,122, p. 61,450 (1989). This rate design policy has been applied to fuel rates as well as to transportation rates. *Great Lakes Gas Transmission LP*, 78 FERC ¶ 61,098, p. 61,348 (1997).

found acceptable for new greenfield pipelines.[39] NEXUS proposes a 14% ROE, which the Commission also has found acceptable for new greenfield pipelines.[40]

The NEXUS Project, as proposed, will be one of the largest greenfield pipeline projects constructed in the United States over the past two decades. While a large portion of the 1.5 million Dth/d of capacity proposed for the Project has been subscribed by shippers, some Project capacity remains unsubscribed. Nevertheless, NEXUS' proposed recourse rates are based on billing determinants that assume the 1.5 million Dth/d is fully subscribed. NEXUS has also proposed a 1.67% depreciation rate for the Project facilities, which approximates a project life of sixty years. Other new greenfield pipelines with approved overall rates of return that exceed the 10.70% rate of return that NEXUS proposes here have proposed rates based upon a significantly shorter project life.[41]

In light of the large capital investment risk undertaken by the sponsoring owners of NEXUS, with respect to the magnitude of the approximately $2 billion capital investment itself and with respect to the cost of service and rate design factors underlying NEXUS' proposed

[39] *See, e.g., ETC Tiger* at P 26 (approving a weighted average cost of capital of 11.375% based on an ROE of 14% and an assumed cost of debt of 8.75%); *Bison Pipeline LLC*, 131 FERC ¶ 61,013 (2010) (approving a weighted average cost of capital of 11% based on an ROE of 14% and an assumed cost of debt of 8%); *Fayetteville Express* at P 28 (approving a weighted average cost of capital of 11.375% based on an ROE of 14% and an assumed cost of debt of 8.75%); *Ruby* at P 53 (approving a weighted average cost of capital of 11.18% based on an ROE of 14% and an assumed cost of debt of 9.3%).

[40] *Id.*

[41] *See, e.g., ETC Tiger*, at P 26 (approving a weighted average cost of capital of 11.375%; an ROE of 14%; and ETC Tiger's requested depreciation expense (*see* Abbreviated Application of ETC Tiger Pipeline, LLC, Docket No. CP10-459-000 at p. 14, n.17 (June 15, 2010) (stating that the proposed depreciation expense was calculated using a depreciation rate of 3%)), which equates to a project life of approximately 33 years); *Fayetteville Express*, at PP 11, 28 (approving a weighted average cost of capital of 11.375%; an ROE of 14%; and a depreciation rate of 3%, which equates to a project life of approximately 33 years); *Ruby*, at P 43 (approving a weighted average cost of capital of 11.18%; an ROE of 14%; and a depreciation rate of 2.86%, which equates to a project life of approximately 35 years).

recourse rates, NEXUS' proposed weighted average cost of capital of 10.70% and related ROE of 14% are reasonable and should be approved.[42]

C. Fuel Rates

Consistent with the Commission's policy on fuel use recovery, NEXUS proposes a fuel retention mechanism with an annual tracker mechanism. The fuel reimbursement mechanism imbedded in the Tariff is designed to recover fuel use on a fuel area basis. Each year, NEXUS will make a fuel tracker filing pursuant to Section 4 of the NGA and Section 21 of the Tariff to true-up any differences between the fuel retained from shippers and the actual fuel consumed.

D. AFUDC Representation

NEXUS hereby provides its statement representing that the Allowance for Funds Used During Construction ("AFUDC") accruals included in the cost of the Project, reflected in Exhibit K hereto, are in compliance with the Commission's policy on AFUDC accruals as set forth in the Docket No. AD10-3-000 proceeding.[43] NEXUS began accruing AFUDC for the Project on October 1, 2014, the date that NEXUS commenced environmental related surveying for the Project, and in accordance with the Commission's AFUDC policy, NEXUS hereby affirms that it had begun to incur capital expenditures for the Project on that date and that activities necessary to prepare the Project for its intended use were in progress at that time.

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[42] NEXUS anticipates that any certificate issued in this proceeding will include the customary condition requiring the filing of a cost and revenue study. As the Commission has stated, the purpose of the cost and revenue study requirement is for the Commission and the public to review the new pipeline's original cost of service and rate design assumptions and estimates, upon which the new pipeline's initial rates are based, to determine whether the new pipeline is over-recovering its cost of service with its approved initial rates. *See Tennessee Gas Pipeline Company, L.L.C., et al.,* 147 FERC ¶ 61,196 at P 50 (2014); *Maritimes & Northeast Pipeline, L.L.C.*, 81 FERC ¶ 61,166, p. 61,726 (1997). Accordingly, these assumptions can be reconsidered in the Commission's customary cost and revenue process.

[43] *Southern Natural Gas Co., et al.*, 130 FERC ¶ 61,193 (2010); *see also Texas Eastern Transmission, LP*, 131 FERC ¶ 61,164 (2010).

XI.
COSTS AND FINANCING

NEXUS estimates that the total capital cost of constructing its new natural gas pipeline system, including compressor stations, metering and regulating stations, and appurtenant facilities will be approximately $2 billion. This cost estimate is detailed in Exhibit K. NEXUS initially will capitalize the Project with 100% equity but anticipates financing 40% of the total cost of the NEXUS Project with non-recourse debt, with the cost of this debt estimated to be 5.75%. On Schedules 2, 4, and 5 in Exhibit L to this Application, NEXUS reflects the total construction charges for the Project and the pro-forma cash flow, pro-forma statement of income, and pro-forma balance sheet, respectively, reflecting the financial information from the year the facilities are proposed to be placed into service in 2017. The pro-forma balance sheet in Schedule 5 reflects the total capital costs of the proposed Project and the associated 40% debt and 60% equity anticipated by NEXUS for the capital necessary for the Project. The financing details are contained in Exhibit L.

XII.
TARIFF

As part of this Application, NEXUS is requesting approval of the Tariff contained in Exhibit P. The Tariff contains the General Terms and Conditions and the Rate Schedules and associated form of service agreement for each service under which NEXUS' services will be offered. NEXUS prepared the proposed Tariff in conformance with the requirements of Parts 154 and 284 of the Commission's regulations,[44] in full compliance with Commission-approved North American Energy Standards Board ("NAESB") standards in effect as of the date hereof, consistent with the Commission's open access polices and precedent, and in compliance with

[44] 18 C.F.R. Part 154 (2014); 18 C.F.R. Part 284 (2014).

Order Nos. 636[45] and 637,[46] including offering, among other items, secondary point rights, segmentation rights, and provisions to effectuate capacity release transactions.

A. Description of Services

1. Firm Services

NEXUS will provide its transportation services on an unbundled, open-access basis under terms and conditions that are not unduly discriminatory. NEXUS' proposed Tariff includes firm transportation service under Rate Schedules FT-1 and LFT-1.

Firm Transportation Service

NEXUS' Rate Schedule FT-1 provides shippers with the right to deliver gas to NEXUS at the primary receipt point on a firm basis and receive gas from NEXUS at a primary delivery point up to the MDQ, pursuant to the General Terms and Conditions. The firm service offered will give shippers certainty as to their ability to transport gas and the assurance that such capability will be available to them at the highest priority on the system.

Hourly Flow Flexibility

Additionally, shippers under Rate Schedule FT-1 will have the right to request firm hourly flow flexibility at primary points of delivery. Specifically, an FT-1 customer will have

---

[45] *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 636, FERC Stats. & Regs. Regulations Preambles ¶ 30,939 (1992), 57 Fed. Reg. 13,267 (Apr. 16, 1992), *order on reh'g*, Order No. 636-A, FERC Stats. & Regs. Regulations Preambles ¶ 30,950 (1992), 57 Fed. Reg. 36,128 (Aug. 12, 1992), *order on reh'g*, Order No. 636-B, 61 FERC ¶ 61,272 (1992), 57 Fed. Reg. 57,911 (Dec. 8, 1992), *reh'g denied*, 62 FERC ¶ 61,007 (1993), *aff'd in part and remanded in part sub nom., United Distribution Co. v. FERC*, 88 F.3d 1105 (D.C. Cir. 1996), *order on remand*, Order No. 636-C, 78 FERC ¶ 61,186 (1997), *cert. denied*, 520 U.S. 1224 (1997), *reh'g denied*, Order No. 636-D, 83 FERC ¶ 61,210 (1998), 63 Fed. Reg. 30,127 (June 3, 1998) ("Order No. 636").

[46] *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services,* Order No. 637, 65 Fed. Reg. 10,156 (Feb. 25, 2000), FERC Stats. & Regs. [Regs. Preambles 1996-2000] ¶ 31,091 (2000), *order on reh'g*, Order No. 637-A, 65 Fed. Reg. 35,706 (June 5, 2000), FERC Stats. & Regs. [Regs. Preambles 1996-2000] ¶ 31,099 (2000), *reh'g denied*, Order No. 637-B, 65 Fed. Reg. 47,284 (Aug. 2, 2000), 92 FERC ¶ 61,062 (2000), *aff'd in part and remanded in part, Interstate Natural Gas Assoc. of Am. v. FERC,* 285 F.3d 18 (D.C. Cir.), *order on remand*, 101 FERC ¶ 61,127 (2002) ("Order No. 637").

the right to request an estimate from NEXUS of the facilities and costs required to provide a firm Maximum Hourly Quantity ("MHQ") at any primary point of delivery under the customer's FT-1 service agreement. Subject to the customer's agreement to reimburse those costs and the satisfaction of certain conditions set forth in Section 2.3 of the proposed Rate Schedule FT-1, such MHQ shall be specified in the FT-1 customer's service agreement. NEXUS believes that this hourly flexibility will be particularly appealing to the growing electric power sector in the Midwest, as described in Section III of this Application.

Limited Firm Transportation Service

In addition to taking service under Rate Schedule FT-1, shippers will also be able to take service under Rate Schedule LFT-1, which is designed to address the needs of those shippers that generally require firm service but are able to accommodate periodic interruption of service. Service under Rate Schedule LFT-1 is a firm transportation service to be available subject to NEXUS' right not to schedule service in whole or in part on any day. NEXUS and a shipper may agree upon specific days or periods of time when NEXUS shall have the right not to schedule service in whole or in part on any day (such days to be defined as "Limited Days"). Once NEXUS has scheduled a customer's nomination for service under Rate Schedule LFT-1 for a gas day, its scheduled volumes will have the same priority as any other firm shipper's scheduled volumes. On any day that is not a Limited Day, if an allocation of scheduled firm volumes is necessary, service under Rate Schedule LFT-1 will be curtailed on a pro rata basis with all other firm transportation services and will have priority over nominations for alternate service at these points. Service under Rate Schedule LFT-1 will not diminish or adversely affect other firm service on NEXUS, and it will be provided on a non-discriminatory basis.

2. Interruptible Services

In addition to firm transportation service under Rate Schedules FT-1 and LFT-1, the Tariff provides for interruptible transportation service under Rate Schedule IT-1, park and loan service under Rate Schedules PAL, and transportation aggregation balancing service under Rate Schedule TABS. Rate Schedule IT-1 allows shippers to obtain transportation service on an as needed and as available basis by tendering gas for delivery to NEXUS up to the shipper's MDQ and only paying for the service received. The park service under Rate Schedule PAL is an interruptible service that allows a shipper to deliver gas quantities at a receipt point that will remain on the NEXUS pipeline system until returned to the shipper. The loan service under Rate Schedule PAL is an interruptible service that allows a shipper to receive quantities of gas from NEXUS at a delivery point and subsequently return the loaned gas to NEXUS. Service under Rate Schedule TABS will allow shippers to aggregate gas from various receipt points on the NEXUS system, thus simplifying nominations management. Interruptible service under Rate Schedules IT-1, PAL, and TABS will only be available to the extent that capacity is available from day to day and from time to time during the gas day, under current conditions and will be provided in accordance with the priorities set forth in the General Terms and Conditions.

B. Compliance with Commission Requirements

NEXUS' Tariff complies with the requirements of Order Nos. 587,[47] 636,[48] and 637,[49]

[47] *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587, 61 Fed. Reg. 39,053 (July 26, 1996), FERC Stats. & Regs. ¶ 31,038 (1996), Order No. 587-B, 62 Fed. Reg. 5,521 (Feb. 6, 1997), FERC Stats. & Regs. ¶ 31,046 (1997), Order No. 587-C, 62 Fed. Reg. 10,684 (Mar. 10, 1997), FERC Stats. & Regs. ¶ 31,050 (1997), Order No. 587-G, 63 Fed Reg. 20,072 (Apr. 23, 1998), FERC Stats. & Regs. ¶ 31,062 (1998), Order No. 587-H, 63 Fed. Reg. 39,509 (July 23, 1998), FERC Stats. & Regs. 1 31,063 (1998), Order No. 587-1, 63 Fed. Reg. 53,565 (Oct. 6, 1998), FERC Stats. & Regs. ¶ 31,067 (1998), order on reh'g, Order No. 587-K, 64 Fed. Reg. 17,276 (Apr. 9, 1999), FERC Stats. & Regs. 1f 31,072 (1999), Order No. 587-M, 65 Fed. Reg. 77,285 (Dec. 11, 2000), FERC Stats. & Regs. ¶ 31,114 (2000), Order No. 587-N, 67 Fed. Reg. 11,906 (Mar. 18, 20002), FERC Stats. & Regs. ¶ 31,125 (2002), Order No. 587-O, 67 Fed. Reg. 30,788 (May 8, 2002), FERC Stats. & Regs. ¶ 31,129 (2002), Order No. 587-R, 68 Fed. Reg. 13,813 (Mar. 21, 2003), FERC Stats. & Regs. ¶ 31,141 (2003), Order No. 587-S, 70

and accordingly, NEXUS will furnish its services on an open-access basis, under non-discriminatory terms and conditions. NEXUS will also make the appropriate arrangements to transmit and receive information on an electronic basis for all transactions, and it will provide all information required by the Commission through Spectra Energy's LINK® System.[50] With respect to NGA Section 7 application requirements set forth in FERC's Gas Quality Policy Statement,[51] NEXUS' gas quality requirements took into consideration the gas quality specifications of the interconnecting pipelines.

C. Periodic Rate Adjustments

NEXUS proposes to use an in-kind fuel tracking mechanism, referred to as its ASA Percentage. The initial ASA Percentage will be calculated using engineering principles and adding to such calculation NEXUS' fuel gas responsibility pursuant to the Texas Eastern Lease, DTE Lease, and Vector U.S. Lease. NEXUS will recalculate the ASA Percentage, to be effective on the first April 1 after one complete year of operation and each April 1 thereafter, by dividing (i) NEXUS' projection for the 12-month period beginning January 1st of fuel usage and any lost and unaccounted for gas by (ii) NEXUS' projection of applicable deliveries for the same 12-month period and adding to this calculation NEXUS' fuel gas responsibility pursuant to the applicable Leases. The resulting percentage will be filed on or before March 1st to go into effect on April 1st of each calendar year.

Fed. Reg. 28,204 (May 17, 2005), FERC Stats. & Regs, ¶ 31,179 (2005), Order No. 587-T, 126 FERC ¶ 61,129 (Feb. 24, 2009), Order No. 587-U, 130 FERC ¶ 61,212 (Mar. 24, 2010), Order No 587-V, 140 FERC ¶ 61,036 (July 19, 2012) ("Order No. 587"), 18 C.F.R. § 284.12(a) (2014) (incorporation by reference of NAESB standards).

[48] Order No. 636.

[49] Order No. 637.

[50] *See* Section 24 of the General Terms and Conditions of the Tariff.

[51] *See Natural Gas Interchangeability*, "Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Pipeline Company Tariffs," 115 FERC ¶ 61,325 at P 45 (2006).

Additionally, NEXUS will maintain a separate ASA deferred account that will be credited for all sales of excess fuel collected pursuant to its ASA mechanism, debited for all purchases of gas and further adjusted for certain operational activities. Such operational activities include: (1) the net annual system cashout balance determined in accordance with Section 19 of the General Terms and Conditions; (2) the net ASA balance, determined in accordance with Section 21 of the General Terms and Conditions and Sections 7.5, 7.6, and 8.1 of Rate Schedule PAL; (3) any other applicable surcharges paid pursuant to the Texas Eastern Lease, the DTE Gas Lease, and the Vector U.S. Lease; and (4) any other account balance as may be approved by the Commission. The annual net ASA balance for the 12-month period ending December 31 will be refunded to or recovered from the NEXUS shippers based upon each shipper's actual throughput during the 12-month accumulation period.

XIII.
OTHER APPLICATIONS AND NON-JURISDICTIONAL FACILITIES

As discussed in Article IX above, in the near future, (i) Texas Eastern and Vector U.S. will be filing separate applications seeking the abandonment authorization necessary to lease capacity on their jurisdictional interstate pipeline systems to NEXUS and (ii) DTE Gas will be requesting a limited jurisdiction certificate authorizing it to lease capacity on its non-jurisdictional intrastate pipeline system to NEXUS. As discussed in Article VI, the NEXUS Project and Texas Eastern's TEAL Project will be reviewed in the NEPA environmental review process as one project.

In addition to the authorizations requested herein, NEXUS will require other federal, state, and local authorizations or permits for the proposed facilities. A listing of the particular permits and approvals required (to the extent that the state or local permits or approvals do not conflict with the Commission's certificate and associated conditions) is included in Resource

Report 1. All of the required Federal Authorizations, including those delegated to a state authority, are also set forth in Exhibit J attached hereto.

Non-jurisdictional facilities associated with the Project include the proposed construction by DTE Gas of new compressor units at two existing DTE Gas compressor station facilities in Michigan. These compressor units will be permitted, constructed, and owned by DTE Gas. In Resource Report No. 1, NEXUS included a brief environmental assessment, including associated cumulative impacts, of this facility prepared by DTE Gas for NEXUS' use along with a site location map.

XIV.
FORM OF NOTICE

In accordance with Section 157.6(b)(7) of the Commission's regulations, NEXUS has included herewith a Form of Notice of this Application suitable for publication in the *Federal Register*.

XV.
LIST OF EXHIBITS

Pursuant to Section 157.6(b)(6) of the Commission's Regulations, set forth below is the listing of exhibits which are included, unless stated otherwise, in this Application in compliance with §§ 157.5 through 157.18.

Exhibit A	Article of Incorporation and Bylaws A copy of the First Amended and Restated Limited Liability Company Agreement of NEXUS Gas Transmission, LLC dated September 9, 2015 is contained in Volume III and is marked "Contains Privileged Information – Do Not Release."
Exhibit B	State Authorization Attached.
Exhibit C	Company Officials Attached.

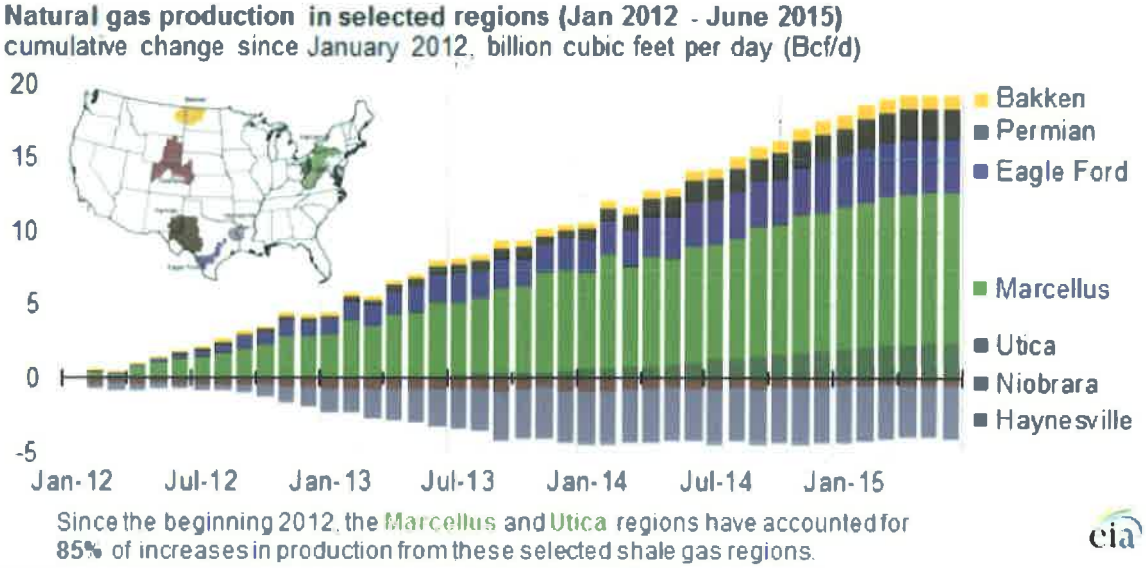
ATTACHMENT 7, Page 1

U.S. Energy Information Administration

Today in Energy

July 28, 2015

Marcellus, Utica provide 85% of U.S. shale gas production growth since start of 2012



Source: U.S. Energy Information Administration, *Drilling Productivity Report*, July 2015

The productivity of natural gas wells in the Marcellus Shale and the neighboring Utica Shale is steadily increasing because of ongoing improvements in precision and efficiency of horizontal drilling and hydraulic fracturing occurring in those regions. Since January 2012, natural gas production in the Marcellus and Utica regions has accounted for 85% of the increase in natural gas production reported in EIA's *Drilling Productivity Report* (DPR) and has driven recent growth in total U.S. natural gas production.

The DPR provides a month-ahead projection of both oil and natural gas production for the seven most significant shale formations in the United States. Although the DPR regions are grouped according to the name of the predominant shale formation, the report analyzes all drilling and production within each geographic area. In practice, this means natural gas production activity in the Marcellus region, which includes Pennsylvania and West Virginia, encompasses not only the Marcellus formation, but also portions of the Utica shale and conventional formations that lay beneath those states. The Utica DPR region, which includes resources that lay beneath Ohio, includes production from the bulk of the Utica formation as well as production from the Point Pleasant shale formation and (to a lesser extent) conventional resources.

The DPR identifies trends in total production and rig productivity, expressed as new-well gas production per rig. The July edition of the DPR noted that average new-well gas production per rig in the Marcellus region was 3.2 million cubic feet of natural gas per day (MMcf/d) in January 2012. In July 2015, new-well gas production per rig increased to 8.3 MMcf/d. This trend corresponded with an overall increase in the amount of natural gas produced in the Marcellus region during the same period. The DPR also indicates that the Marcellus region produced an estimated 6.3 billion cubic feet of natural gas per day (Bcf/d) in January 2012, increasing to 16.5 Bcf/d in July 2015.

The Utica region also experienced significant gains in rig productivity and production. In January 2012, new-well gas production per rig in the Utica region averaged 0.31 MMcf/d. July 2015 new-well gas production per rig is 6.9 MMcf/d. The DPR also indicates that the region's total natural gas production increased rapidly over the same period: production in July 2015 was almost 18 times higher than in January 2013 (2.6 Bcf/d and 0.15 Bcf/d, respectively).

Increases in natural gas production from these regions occurred because of many factors, including:

- Greater use of advanced drilling techniques
- Increased number of stages used in hydraulic fracturing operations
- Increased use of techniques such as zipper fracturing (simultaneous fracturing of individual stages of two parallel horizontal wells)
- Use of specific components during well completion that aid in increasing fracture size and porosity of the geologic formation being targeted

EIA's latest data show that natural gas produced from U.S. shale basins now accounts for 56% of U.S. dry natural gas production. Collectively, shale gas production from the Marcellus and Utica regions increased by 12.6 Bcf/d from January 2012 to June 2015, making these regions the driving forces behind overall U.S. natural gas production growth.

Principal contributors: John Krohn, Grant Nülle

eia Utica Region
Drilling Productivity Report

November 2015
drilling data through October
projected production through December

Oil +11 barrels/day month over month

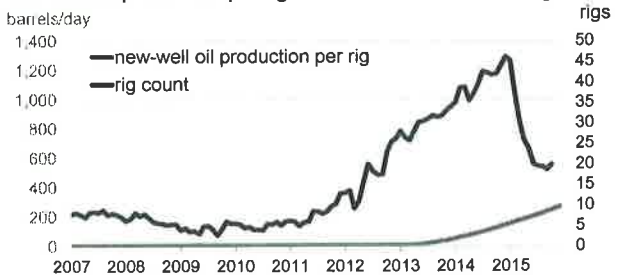
269 *December*
258 *November*
barrels/day

Monthly additions from one average rig

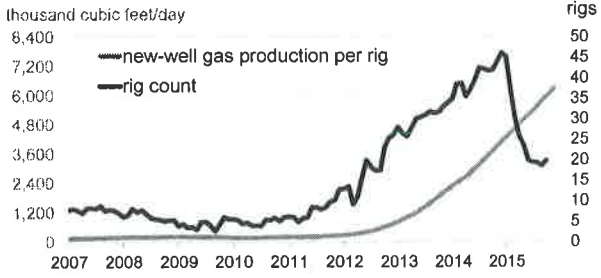
December **6,313**
November **6,124**
thousand cubic feet/day

Gas +189 thousand cubic feet/day month over month

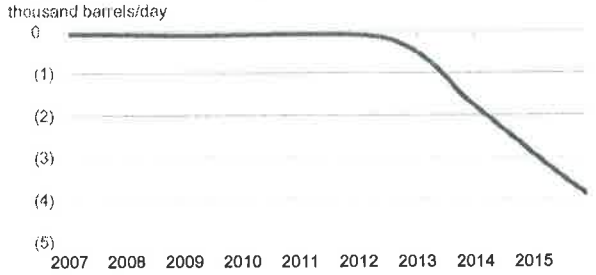
Utica Region
New-well oil production per rig



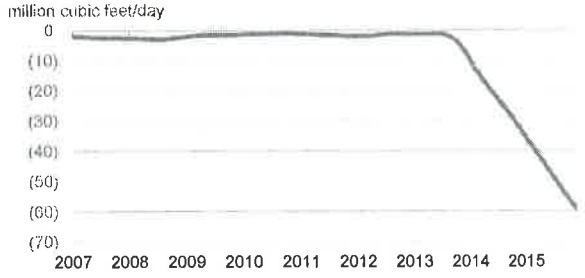
Utica Region
New-well gas production per rig



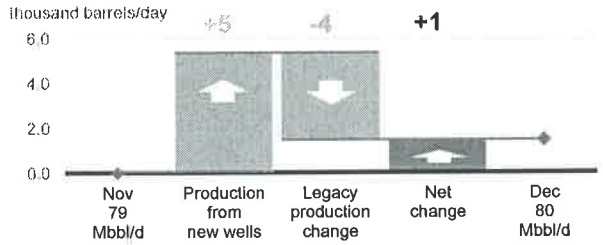
Utica Region
Legacy oil production change



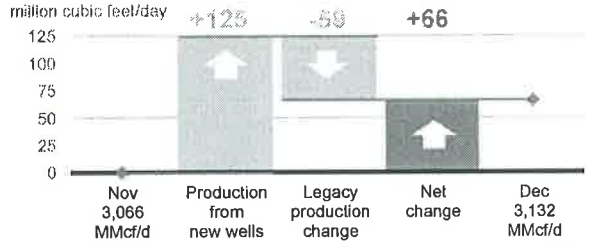
Utica Region
Legacy gas production change



Utica Region
Indicated change in oil production (Dec vs. Nov)

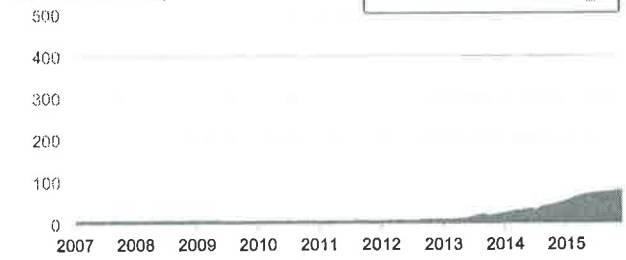


Utica Region
Indicated change in natural gas production (Dec vs. Nov)



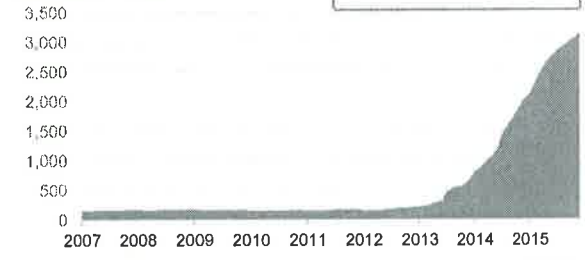
Utica Region
Oil production

Oil +1 thousand barrels/day month over month



Utica Region
Natural gas production

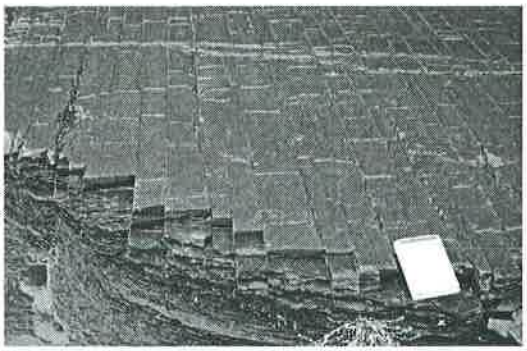
Gas +66 million cubic feet/day month over month



Utica Shale

The **Utica Shale** is a stratigraphical unit of Middle Ordovician age in the Appalachian Basin. It underlies much of the northeastern United States and adjacent parts of Canada.

It takes the name from the city of Utica, New York, as it was first described as an outcrop along the Starch Factory Creek east of the city by Ebenezer Emmons in 1842.[2]



Rectangular joints within siltstone and black shales of the Utica Shale near Fort Plain, New York

1 Lithology

The Utica Shale is composed of calcareous, organic, and rich shale.[3]

2 Oil and gas

The Utica shale is a major source of tight gas in Quebec, and is rapidly becoming so in Ohio.

2.1 Quebec

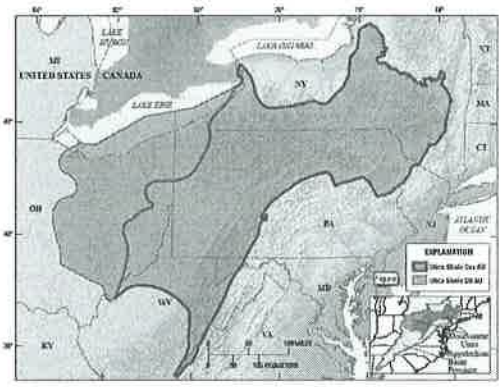
Drilling and producing from the Utica Shale began in 2006 in Quebec, focusing on an area south of the St. Lawrence River between Montreal and Quebec City. Interest has grown in the region since Denver-based Forest Oil Corp. announced a significant discovery there after testing two vertical wells. Forest Oil said its Quebec assets may hold as much as four trillion cubic feet of gas reserves, and that the Utica shale has similar rock properties to the Barnett shale in Texas.

Forest Oil, which has several junior partners in the region, has drilled both vertical and horizontal wells. Calgary-based Talisman Energy has drilled five vertical Utica wells, and began drilling two horizontal Utica wells in late 2009 with its partner Questerre Energy, which holds under lease more than 1 million gross acres of land in the region. Other companies in the play are Quebec-based Gastem and Calgary-based Canbriam Energy.

The Utica Shale in Quebec potentially holds 4×10^{12} cu ft (110×10^{9} m^3) at production rates of 1×10^{6} cu ft (28,000 m^3) per day[4][5] From 2006 through 2009 24 wells, both vertical and horizontal, were drilled to test the Utica. Positive gas flow test results were reported, although none of the wells were producing at the end of 2009.[6] Gastem, one of the Utica shale producers, took its Utica Shale expertise to drill across the border in New York state.[7]

The Province of Quebec imposed a moratorium on hydraulic fracturing in March 2012.[8]

2.2 Ohio



Map showing the location of the oil and gas assessment units (AU) for the Utica Shale in the Appalachian Basin Province.

Utica Shale drilling and production began in Ohio in 2011. Ohio as of 2013 is becoming a major natural gas and oil producer from the Utica Shale in the eastern part of the state.[9][10] Map of Ohio Utica Shale drilling permits and activity by date.[11][12] In 2011 drilling and permits for drilling in the Utica Shale in Ohio have reached record highs [13] Although the prospective Utica area extends into Pennsylvania and West Virginia, as of 2013, most activity has been in Ohio, because the Ohio portion is believed to be richer in oil, condensate, and natural gas

liquids.

2.3 New York

In 2009, the Canadian company Gastem, which had been drilling gas wells into the Utica Shale in Quebec, drilled the first of its three state-permitted Utica Shale wells in New York. The first well drilled was in Otsego County.[14]

New York imposed a moratorium on large-volume hydraulic fracturing in 2008. The governor, who has the power to lift the moratorium, has said that he will make a decision before the 2014 election.[15]

2.4 Resource size

The US Energy Information Administration estimated in 2012 that the Utica Shale in the US held 15.7 trillion cubic feet of unproved, technically recoverable gas. The average well was estimated to produce 1.13 billion cubic feet of gas.[16] The same year, the US Geological survey estimated that the Utica Shale had 38.2 trillion cubic feet of undiscovered technically recoverable gas, 940 million barrels of oil, and 208 million barrels of natural gas liquids.[17]

3 Distribution

The Utica Shale lies under most of New York, Pennsylvania, Ohio, and West Virginia and extends under adjacent parts of Ontario and Quebec in Canada and Kentucky, Maryland, Tennessee, and Virginia in the United States.

It occurs in outcrops in the state of New York[1] and in the subsurface in the provinces of Quebec and Ontario.[3] Parts of the island of Montreal consist of Utica shale, which affected construction of parts of the Montreal metro. In some regions of Pennsylvania, the Utica Shale reaches to almost two miles below water level. However, the depth of the Utica Shale rock decreases to the west into Ohio and to the northwest towards Canada. [18]

It reaches a thickness of up to 1,000 feet (300 m)[1] and can be as thin as 70 feet (20 m) towards the margins of the basin. 250 feet (80 m) are exposed in the type section.

4 Relationship to other units

The Utica Shale underlies the Lorraine Group and overlies the Trenton Group limestone and the Canajoharie shale in Mohawk River Valley.

The Utica Shale is divided into the Nowadaga Zone, Loyal Creek Zone and Holland Patent Zone.[1]

It lies a few thousand feet under the Marcellus Shale.

5 References

[1] USGS-GEOLOX Database. "Utica Shale". Retrieved 2010-02-01.

[2] Emmons, Ebenezer, 1842, Geology of New York; Part II, Survey of the second geological district: New York State Museum, 437p.

[3] Lexicon of Canadian Geologic Units. "Utica Shale". Retrieved 2010-02-01.

[4] Forest Oil Corporation - Press Releases and Notices

[5] Press release > Investors > Junex

[6] Susan R. Eaton, "Shale play extends to Canada," *AAPG Explorer*, January 2010, p.10-24.

[7] "New York to get Utica shale exploration". *Oil & Gas Journal* (PennWell Corporation) **106** (12): 41. 2008-03-24. Retrieved 2009-07-07.

[8] Quebec installs outright moratorium on hydraulic fracturing, International Business Times, 4 April 2012.

[9] *Utica Shale Oil Discovery In Ohio, News And Maps,* Utica Shale News and Maps

[10] OhioDNR.gov. "Ohio Oil and Natural Gas Well and Shale Development Resources". Retrieved 2012-05-05.

[11] uticashalemaps.com. "Map of Ohio Utica drilling permits and activity by date". Retrieved 2012-05-05.

[12] Ohio.gov Database. "Marcellus and Utica Shale Data". Retrieved 2011-03-08.

[13] Gerino, Dan. "'Fracking' permits booming". *Columbus Dispatch*.

[14] Tom Grace, "Officials positive following gas-well tour," Oneonta Daily Star, 7 October 2009.

[15] New York governor says he'll make fracking decision before 2014 election, NPR State Impact, May 2013.

[16] US Energy Information Administration, Annual Energy outlook 2012, accessed 14 Sept. 2013.

[17] US Geological Survey, Assessment of Undiscovered Oil and Gas Resources of the Ordovician Utica Shale of the Appalachian Basin Province, 2012, Fact Sheet 2012-3116, Sept. 2012.

[18] "US Shale Oil". Retrieved 2015-03-09.

6 External links

- Utica Shale - The Natural Gas Giant Below the Marcellus? at geology.com
- Utica Shale, A Major Oil Discovery at TheInfoMine.com
- Utica Shale, Maps at UticaShaleMaps.com

7 Text and image sources, contributors, and licenses

7.1 Text

- **Utica Shale** *Source:* https://en.wikipedia.org/wiki/Utica_Shale?oldid=670293689 *Contributors:* Montrealais, Vsmith, Zaslav, Hmains, Fralambert, Deli nk, Qyd, Tanada, Beagel, Matteguy, VolkovBot, Plazak, Deshan77, Addbot, Luckas-bot, Yobot, Anna Frodesiak, Tyrol5, A412, Haaninjo, EmausBot, Rygel, M.C., Snotbot and Anonymous: 9

7.2 Images

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